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FEDERAL RESERVE'S SECOND MONETARY POLICY REPORT FOR 1989

HEARING

BEFORE THE

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

FIRST SESSION

ON

OVERSIGHT ON THE MONETARY POLICY REPORT TO CONGRESS PURSUANT TO THE FULL EMPLOYMENT AND BALANCED GROWTH ACT OF 1978

AUGUST 1, 1989

Printed for the use of the Committee on Banking, Housing, and Urban Affairs

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FEDERAL RESERVE'S SECOND MONETARY POLICY REPORT FOR 1989

TUESDAY, AUGUST 1, 1989

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The committee met at 10:05 a.m., pursuant to notice, in room SD-628, Dirksen Senate Office Building, Senator Paul S. Sarbanes, presiding.

Present: Senators Sarbanes, Sasser, Shelby, Graham, Heinz, D'Amato, Gramm, Mack, and Pressler.

OPENING STATEMENT OF SENATOR SARBANES

Senator **SARBANES**. The committee will come to order.

I am very pleased to welcome Chairman Greenspan here this morning to testify on the Federal Reserve's monetary policy report to the Congress.

This hearing was originally scheduled to be held a week ago, but the very deep involvement of this committee in the savings and loan bill made it necessary to delay that hearing.

Senator Riegle had planned to be here this morning to chair the hearing, but an illness in his family made it impossible for him to be present. Nevertheless, he felt strong that the committee should proceed since we want to review the Federal Reserve's report, as we are going to do today prior to the August recess which is scheduled to commence at the end of this week.

It appears that the U.S. economy may be entering a rather precarious period. We have experienced growth, albeit slow growth, much of it for an extended period, but questions are now being raised whether that path is sustainable. The Federal Reserve now projects unemployment next year in the 5½ to 6 percent range and real GNP growth in the range of 1½ to 2 percent.

I think there is a serious question about whether the economy can maintain or sustain such a low level of growth while avoiding at the same time a further downturn, and we hope to examine that question with the Chairman this morning.

Mr. Chairman, we look forward to hearing from you and your assessment of how the Federal Reserve is likely to deal with the current economic outlook.

Before turning to you for your testimony, I will turn to my colleagues and see if they have any statement they might wish to make.

STATEMENT OF SENATOR ALAN DIXON

Senator **Dixon**. Mr. Chairman, I am pleased to be here this morning as the Senate Banking Committee conducts hearings on monetary policy with Federal Reserve Chairman Alan Greenspan.

It has been quite a busy 6 months since we last heard from Chairman Greenspan. We all have been working hard on the thrift legislation. Chairman Greenspan has also been trying to engineer a "soft landing" for our economy. The Federal Reserve's efforts in this regard will, I hope, prove successful.

Now that work on the thrift bill is almost complete, I wish to register my strong interest that the Banking Committee take up financial modernization legislation upon its return from the August recess. I believe that Chairman Greenspan has strong views on expanding bank powers. I would prefer to have Congress work its will than rely on the appropriate, yet incremental approach of the FED. Mr. Chairman, I hope that S. 305 will be at the top of your agenda for the committee when we reconvene in September.

Thank you, Mr. Chairman.

STATEMENT BY SENATOR RICHARD SHELBY

Senator **Shelby**. Mr. Chairman, let me commend you for scheduling this morning's hearing. I am glad that we have this opportunity to meet with the Chairman of the Federal Reserve before the August recess commences.

As always, Chairman Greenspan, it is a pleasure to have you before this committee. We are interested in what light you can shed on the direction of interest rates and the underlying situation of the economy. I have several concerns that I would like to mention briefly and I hope that we could discuss these issues during the discussion period.

We in this committee and in Congress, the administration, the private sector, and in the academic community, all speak frequently of the global economy, of the increasing interdependence among nations. We acknowledge that this evolution toward "internationalization" is inevitable and irreversible because it has been facilitated by the rapid advancement in telecommunications and information technology, by improved transportation and as you point out in a particularly interesting statement, by the downsizing of economic output.

We recognize this trend. However, I am concerned that we are not making adequate internal changes to respond to external pressures. Every American that drives a Japanese car or buys a VCR knows that the Pacific rim nations are eating our lunch in many traditionally American industries. We see Europe making impressive strides toward 1992 and a common market. Even Eastern bloc nations are making motions toward entering this new global market place.

Yet, the U.S. remains hindered by macroeconomic problems. We have become, during the past 8 years, the world's largest debtor nation, rather than the world's largest creditor. We are saddled with an enormous budget deficit that greatly restricts our ability to fully address the competitive challenges that have been laid before us by our trading partners.

That budget deficit eats away at our modest private savings rate to give us a dismal overall savings rate of 2.8 percent, the lowest of any major industrial nation. As recently as the mid-1970's, our personal savings rate was 9.4 percent. At the same time, Japan's saving rate was at 17 percent, Germany's was at 14 percent and Canada's at 13.3 percent. While in 1986, the U.S. savings rate had plunged by more than 50 percent to 4 percent, Japan's savings rate remained high, at 16.4 percent, and Germany's at 13.4 percent.

I point this out for two reasons. First, our personal savings rate is abysmal and cannot, for the health of our Nation, continue to stay so low. We must encourage Americans to save. Against the advice of experts, I have considered legislation to encourage saving which would do so by permitting an exclusion from personal income of the first $200 in dividends and interest earned. While I do not presume that this modest effort could turn around the savings rate crisis, I believe that it would be a step in the right direction. However, this income exclusion would cost the Federal Government approximately $15 billion over a 5-year period. While this is not a huge sum, it is too much in this time of budget deficits.

But I point out the savings rate for another reason and that is for its ultimate impact on the cost of capital for business. Industry in this Nation pays substantially more for the capital it needs for investing in long term projects than do businesses abroad. Consequently, U.S. businesses require that projects break even much quicker than their foreign competitors.

This stems from a variety of factors, not the least of which is the emphasis in this country on short term profits. While Japanese corporations benefit from "webs" of stable shareholders who have invested for the long term, U.S. corporations must focus on quarterly reports. Just a couple of weeks ago, Norm Augustine of Martin Marietta testified that the publicly held ownership of his company, with a market capitalization, turned over every year. Mr. Augustine related Martin Marietta's experience of making significant expenditures on R&D several years ago, as part of its long term plan, only to have the stock price plummet. Fortunately, there was no threat of a takeover, the R&D paid off, and they are now considered to have been wise.

But the fact today is that so many companies do not have the luxury of taking a long term perspective. The cost of capital is too high to make many projects feasible, because investors demand consistently high returns. I believe that this short term outlook by investors is severely limiting our ability to compete in the global market.

I am concerned that, while the Federal Government is cognizant of the challenge posed by the internationalization, it is doing far too little to assist the United States in meeting that challenge. The Federal deficit is our single largest problem. This dissaving increases interest rates and hamstrings our ability to respond to many issues. I would encourage you, in your capacity as guardian of the economy, to encourage the administration to make the budget deficit its No. 1 priority.

In order to encourage long term investment, it seems necessary to bring back a capital gains structure that rewards investors for holding on to investments, while penalizing those who focus on short-term trading. I am sure that you have some guidelines on this issue and I would be interested in your comments.

As for the budget issue, I look forward to what you have to say about the optimal method of financing the savings and loan resolution now that we are at this stage of the game. The administration and members of this committee have argued that waiving Gramm-Rudman will send a signal to foreign investors that the Federal Government is not serious about exercising fiscal restraint. This in turn could send interest rates up. I realize that you have responded to this subject before, but we are now in the situation of facing a month long recess without having acted on this legislation. I believe that your comments would be constructive.

Thank you, Mr. Chairman.

OPENING STATEMENT OF SENATOR D'AMATO

Senator D'AMATO. Mr. Chairman, I welcome Chairman Greenspan and the news he brings. In the 6 months since the FED's last report on monetary policy, we have observed the effects of the Fed's steady hand on the money supply controls. Not long ago we heard dire predictions of inflationary cycles and an overheating economy based on low unemployment figures and high manufacturing capacity utilization. Instead, the American economy has cooled considerably. Now the same doomsayers are predicting the opposite problem: a recession.

When confronted with the ever vigilant prophets of doom, I am reminded of the rule about making predictions: if you predict often enough you will eventually be right about something.

We all recognize that economics is a rough science and only time will tell whether we have achieved the illusive "soft landing". In any case, it appears now that Chairman Greenspan has steered a course in monetary policy that has slowed growth without choking off the robust economy which has created jobs and increases opportunity for all Americans. And he is to be congratulated.

Interest rates are declining, consumer spending is slowing and while unemployment has risen slightly, 180,000 new jobs were created in the month of June. So the economy continues to demonstrate the resilience of the American economy.

We do have some problems that I believe the Government is at least partially responsible for and I would like to hear Dr. Greenspan's thoughts on them. Despite the recent decline in interest rates, American businesses still face a competitive disadvantage because of the high cost of capital for investment. One effect of our thin domestic capital pool is the decline in manufacturing productivity over the past 12 months. I note that Dr. Greenspan's testimony emphasizes the importance of productivity-enhancing investment to our long-term national goals. We are in total agreement as to that.

While the Federal deficit is surely a major factor in our high interest rates, the low rate of private savings is also a major cause of our high domestic cost of capital.

Our tax code which taxes savings and investment while promoting consumption is one reason for our low savings rate. I believe this is a matter which we must address now. I know that Chairman

Greenspan is reluctant to support a revival of the Individual Retirement Account in the current deficit evnironment, and but I also know that he has been a leader in educating policy makers on this important matter of savings rates. Therefore, as always, I look forward to Dr. Greenspan's insightful testimony.

Thank you, Mr. Chairman.

Senator Heinz.

OPENING COMMENT BY SENATOR HEINZ

Senator HEINZ. Mr. Chairman, I don't wish to make a statement, but I do want to welcome Alan Greenspan back to the Senate Banking Committee. We have obviously many subjects we will want to discuss with you, Alan, and we obviously are interested in hearing the comments you will make in this your regular periodic report to the committee.

It's good to have you here.

Senator SARBANES. Senator Mack.

Senator MACK. Welcome, Mr. Greenspan, and I look forward to your testimony.

Senator SARBANES. Mr. Chairman, we are ready to hear from you, please.

STATEMENT OF ALAN GREENSPAN, CHAIRMAN, BOARD OF GOVERNORS, FEDERAL RESERVE SYSTEM

Chairman GREENSPAN. Thank you very much, Mr. Chairman.

I very much appreciate this opportunity to appear before you in connection with the Federal Reserve's semiannual Monetary Policy Report to the Congress.

In my prepared remarks today I will adhere closely to the matter at hand—that is, monetary policy and the state of the Nation's economy.

I will excerpt from my prepared remarks and request that the full text be included in the record.

Senator SARBANES. The full text will be so included.

Chairman GREENSPAN. Over the course of this year the contours of the broad economic setting have changed. As a consequence, the stance of monetary policy also has shifted somewhat, although the fundamental objective of our policy has not. That objective remains to maximize sustainable economic growth, which in turn requires the achievement of price stability over time.

At the time of our last report to the Congress in February of this year, we characterized the economy as strong with the risks on the side of a further intensifying of price pressures. In view of the dimensions of the inflation threat, the Federal Reserve tightened policy further earlier this year.

Additional reserve restraint was applied through open market operations and the discount rate was raised a half a percentage point. The determination to resist any pickup in inflation also motivated the decision of the Federal Open Market Committee at its February meeting to lower the ranges for money and credit growth for 1989.

Reflecting the economy's apparent strength and the tighter stance of policy, interest rates rose during the first quarter. Short-term market rates increased about a percentage point over the quarter leaving them up more than three points from a year earlier, but long-term rates held relatively steady.

By the beginning of the second quarter the outlook for spending and prices was becoming more mixed. Scattering indications of an emerging softening and economic activity began to appear prompting market interest rates to pull back.

Rates continued to fall as a variety of factors pointed to some lessening of price pressures in the period ahead. In particular, money growth weakened further, the underlying trend in inflation appeared to be less severe than markets had feared, the dollar continued to climb and domestic demand slackened.

Against this background, the Federal Reserve began to ease reserve conditions in early June. The easing has consisted of several steps, the most recent of which took place last week. By the end of July, most short-term market rates had dropped more than 1½ percentage points from their March peaks, and long-term interest rates were down somewhat less, with bond rates at their lowest levels in more than 2 years.

Economic activity is estimated to have grown in the first half of this year at a rate somewhat below that of potential GNP. This stands in sharp contrast to the performance of the preceding 2 years during which growth proceeded at a pace that placed increasing pressures on labor and capital resources.

Prices did accelerate in the first 6 months of this year, but most of the increase may be transitory, related to supply conditions in food and petroleum markets. After a gradual pickup over the preceding 2 years, price inflation outside of food and energy held near its 1988 pace.

The strength of the inflation pressures in 1988 and into 1989 was, of course, the motive for the progressive tightening of policy that the Federal Reserve undertook over that period. And the outlook for some reduction in these pressures owes in part to that policy restraint.

The associated rise in market interest rates, beginning early last year, opened up wide opportunity costs of holding money assets and resulted in a sharp slowing of money growth.

In addition to the effect of interest rates, several special factors played a role in slowing money growth and boosting velocity—that is, the ratio of nominal GNP to money. Probably the most important of these was the unexpectedly large size of personal tax liabilities in April. Many individuals evidently were surprised by the size of their liabilities and drew down their money balances below normal levels to make the required payments.

The difficulties of the thrift industry also may have affected M2 growth. Late last year as public attention increasingly focused on the financial condition of the industry and its insurance fund, FSLIC insured institutions began to lose deposits at a significant rate. While most of the funds apparently were repositioned within M2 at commercial banks or money funds, this fact likely also had some dampening effect on that aggregate.

Most recently, growth of the broader monetary aggregates has picked up markedly. The restraint imposed by the earlier rise in market interest rates is fading and households appear to be rebuilding their tax depleted balances.

The level of M2 on average in May was 1 percent above its fourth quarter base, but rapid growth in June and July has lifted the year-to-date increase to around the lower half of its 3 to 7 percent annual target cone. M3 also accelerated in June and July, placing it well into the lower half of its range.

Looking ahead at the remainder of 1989 and into 1990, recent developments suggest that the balance of risks may have shifted somewhat away from greater inflation. Even so, inflation remains high, clearly above our objective. Any inflation that persists will hinder the economy's ability to perform at peak efficiency and to create jobs.

Consequently, monetary policy will need to continue to focus on laying the groundwork for gradual progress toward price stability. Such an outcome need not imply a marked downturn in the economy, and policy will have to be alerted to any emerging indications of a cumulative weakening of activity.

However, progress in inflation and optimum growth over time also require that our productive resources not be under such pressures that their prices continue to rise without abating. In light of historical patterns of labor and capital growth and productivity, this progress very likely will be associated with a more moderate and, hence, sustainable expansion in demand than we experienced in 1987 and 1988.

At its meeting last month, the Federal Open Market Committee determined that a combination of continued economic growth and reduced pressures on prices would be prompted by growth of money and debt in 1989 within the annual ranges that were set in February.

Moreover, it tentatively decided to maintain these same ranges through 1990. The specified ranges both for this year and next retain the 4-percentage-point width first instituted for the broader aggregates in 1988. Considerable uncertainties about the behavior of money and credit remain, and the greater breadth allows for a range of paths for these aggregates as financial and economic developments may warrant.

In view of the apparent variability, particularly over the short run, in the relationships between the monetary aggregates and the economy, policy will continue to be carried out with attention to a wide range of economic and financial indicators. The complex nature of the economy and the chance of false signals demand that we cast our net broadly—gathering information on prices, real activity, financial and foreign exchange markets, and related data.

Over the remainder of the year, M2 should continue to be supported by the decline in interest rates of recent months which, along with the growth of income, is likely to result in an expansion of that aggregate well within its target range. We also expect M3 to strengthen from its rate of growth over the first half of the year moving up into the middle of its target range by year end.

Growth of money and debt within the 1989 ranges is expected to be consistent with nominal GNP rising this year at a pace not too far from last year's increase according to the projections of the Federal Open Market Committee members and other presidents of

Reserve Banks. These projections, however, incorporate somewhat more inflation and less real growth than we experienced in 1988.

The central tendency of the projections of 2 to 2½ percent real GNP growth over the 4 quarters of this year implies continued moderate economic growth throughout the year. For the year as a whole, these projections anticipate that growth is likely to be strongest in the investment and export sectors of the economy with expansion of consumer expenditures and Government purchases rather subdued.

A sectoral pattern of growth such as this would in fact serve the nation's longer-term needs by contributing to a better external balance.

Fundamentally, improvement in our international payments position requires productivity enhancing investment and a higher national savings rate. In this regard the Federal Government can play a significant, positive role by reducing the budget deficit.

The outlook for inflation this year, as reflected in the central tendency of the projections expressed at the FOMC meeting, is for a 5 to 5½ percent increase in the consumer price index. A figure in this range would represent the highest annual inflation rate in the United States since 1981. This is a source of concern to the Federal Reserve. Yet this rate is below that experienced in the first 6 months, and hence this implies a considerable slowing over the remainder of the year, reflecting earlier monetary policy restraint and a prospective moderation in food and energy prices.

Federal Reserve policy is focused on laying the groundwork for more definite progress in reducing inflation pressures in 1990, while continuing support for the economic expansion. The ranges provisionally established for growth of money and debt next year are consistent with these intentions.

Although the 1990 ranges do not represent another step in the gradual multiyear lowering of ranges, the Federal Reserve's intent to make further progress against inflation remains intact. Uncertainties about the outlook suggested a pause in the process of reducing the ranges. However, the committee recognizes that our goal of price stability will require additional downward adjustments in these ranges over time.

Of course, as we draw closer to 1990, the economic and financial conditions prevailing will become clearer, allowing us to approach our decisions on the ranges with more confidence. Hence, the current ranges for money and credit growth in 1990 should be viewed as very preliminary.

The economic projections for 1990 made by the Governors and the Reserve Bank presidents center in a range of 1½ to 2 percent real GNP growth and 4½ to 5 percent inflation for next year. Naturally, as I have already noted, there are considerable uncertainties surrounding forecasts for 1990.

The Federal Reserve is committed to doing its utmost to ensure prosperity and rising standards of living over the long run. Given the powers and responsibilities of the Central Bank, that means, most importantly, maintaining confidence in our currency by maintaining its purchasing power.

The principal role of monetary policy is to provide a stable background against which economic decisions can be made. A stable, predictable price environment is essential to ensure that resources can be put to their best use and ample investment for the future can be made.

In the long run, the link between money and prices is unassailable. That link is central to the mission of the Federal Reserve, for it reminds us that without the acquiescence of the Central Bank, inflation cannot take root. Ultimately, the monetary authorities must face the responsibility for lasting price trends.

While oil price shocks, droughts, higher taxes or new government regulations may boost broad price indexes at one time or another, sustained inflation requires at least the forbearance of the Central Bank.

Moreover, as many nations have learned, inflation can be corrosive. As it accelerates, the signals of the market system lose their value, financial assets lose their worth and economic progress becomes impossible.

Thankfully, this bleak scenario is not one that we in the United States are confronting. We do, however, face a difficul balancing act. The economy has prospered in recent years. The economic expansion has proven exceptionally durable, employment has surpassed all but the most optimistic expectations, and the underlying inflation rate, after coming down quickly in the early 1980's, has accelerated only modestly. But now signs of softness in the economy have shown up.

Accordingly, it is prudent for the Federal Reserve to recognize the risk that such softness conceivably could accumulate and deepen, resulting in a substantial downturn in activity. We also recognize, however, that a degree of slack in labor and product markets will ease the inflationary pressures that have built up.

So our policy under current circumstances is not oriented toward avoiding a slowdown in demand, for a slowing from the unsustainable rates of 1987 and 1988 is probably unavoidable. Rather what we seek is to avoid an unnecessary and destructive recession.

The balance that we must strike is to support moderate growth of demand in the near term while concurrently progressing toward our long-term goal of a stable price level.

Admittedly, the balance we are seeking is a delicate one. I wish I could say that the business cycle had been repealed, but some day, some event will end the extraordinary string of economic advances that has prevailed since late 1982. For example, an inadvertent, excess accumulation of inventories or an external supply shock could lead to a significant retrenchment in economic activity.

Moreover, I cannot rule out a policy mistake as the trigger for a downturn. We at the Federal Reserve, for example, might fail to restrain a speculative surge in the economy or fail to recognize that we are holding reserves too tight for too long.

Given the lags in the effects of policy, forecasts inevitably are involved and thus errors inevitably arise. Our job is to keep such errors to an absolute minimum. An efficient policy is one that doesn't lose its bearings, that homes in on price stability over time, but that copes with and makes allowances for any unforeseen weakness in economic activity. It is such a policy that the Federal Reserve will endeavor to pursue.

Thank you very much.

[The complete prepared statement of Chairman Greenspan follows:]

For release on delivery
10:00 a.m., E.D.T.
July 20, 1989

Statement by

Alan Greenspan

Chairman, Board of Governors of the Federal Reserve System

before the

Subcommittee on Domestic Monetary Policy

of the

Committee on Banking, Finance and Urban Affairs

U.S. House of Representatives

July 20, 1989

Mr. Chairman and Members of the Committee: I appreciate this opportunity to appear before you in connection with the Federal Reserve's semiannual Monetary Policy Report to Congress. In my prepared remarks today I will adhere closely to the matter at hand--that is, monetary policy and the state of the nation's economy.

Economic and Monetary Developments Thus Far in 1989

Over the course of this year, the contours of the broad economic setting have changed. As a consequence, the stance of monetary policy also has shifted somewhat, although the fundamental objective of our policy has not. That objective remains to maximize sustainable economic growth, which in turn requires the achievement of price stability over time.

Early in the year, the Federal Reserve continued on the path toward increased restraint upon which it had embarked in the spring of 1988. At the time of our report to Congress in February of this year, I characterized the economy as strong, with the risks on the side of a further intensifying of price pressures. Labor markets had been tightening noticeably, heightening concerns that inflationary pressures might be building. Moreover, increases in food and crude oil prices were raising the major inflation indexes.

In view of the dimensions of the inflation threat, the Federal Reserve tightened policy further early this year. Additional reserve restraint was applied through open market operations, and the discount rate was raised 1/2 percentage point. The determination to resist any pickup in inflation also motivated the decision of the Federal Open Market Committee at its February meeting to lower the ranges for money and credit growth for 1989. This marked the third consecutive year in which the target ranges were reduced, and it underscored our commitment to achieving price stability over time.

Reflecting the economy's apparent strength and the tighter stance of policy, interest rates rose during the first quarter. Short-term market rates increased around 1 percentage point over the quarter, leaving them up more than 3 points from a year earlier, but long-term rates held relatively steady. The year-long rise in short-term rates had a marked impact on growth of the monetary aggregates, restraining the demand for money as funds flowed instead into higher-yielding market instruments.

By the beginning of the second quarter, the outlook for spending and prices was becoming more mixed. Scattered indications of an emerging softening in economic activity began to appear, prompting market interest rates to pull back. Rates continued to fall as a variety of factors

pointed to some lessening of price pressures in the period ahead. In particular, money growth weakened further, the underlying trend in inflation appeared to be less severe than markets had feared, the dollar continued to climb, and domestic demand slackened. Against this background, the Federal Reserve eased reserve conditions, first in early June and again in early July. By mid-July, most short-term market rates had fallen to a bit below their year-end levels, and long-term interest rates were down as much as a full point, to their lowest levels in more than two years.

Economic activity apparently grew in the first half of this year at a rate somewhat below that of potential GNP. This stands in sharp contrast to the performance of the preceding two years during which growth proceeded at a pace that placed increasing pressures on labor and capital resources. Job creation has remained the hallmark of the current expansion, however. Even with the more moderate pace of economic growth in the first half of this year, nearly 1-1/2 million new jobs were added to payrolls. And this occurred apparently without triggering an acceleration in wages.

Prices did accelerate in the first six months of this year, but most of the increase may be transitory, related to supply conditions in food and petroleum markets. After a gradual pickup over the preceding two years, price inflation outside of food and energy held near its 1988 pace.

Excluding food and energy is one traditional way of estimating the "underlying" rate of inflation. Although there is some logic in abstracting from these prices, which are quite volatile and can be dominated over the short run by supply disturbances, this approach is incomplete. An alternate picture of near-term price-setting behavior can be gleaned by examining the components of prices, that is, the cost pressures facing firms and the behavior of their profits. Such an analysis reveals that, in manufacturing, much of the pickup in inflation thus far in 1989 is accounted for by higher unit energy and labor costs. The runup in world crude oil prices, which reflected a series of production accidents this spring as well as a degree of output restraint on the part of some OPEC oil producers, is the main reason for the increase in energy costs.

In contrast, movements in hourly compensation appear to have been quite moderate in the first half of this year, and the acceleration in unit labor costs largely reflected slower growth in productivity. Such a deceleration in productivity is typical as the pace of economic activity slows. But, given the relatively high levels of resource utilization, it also is possible that firms were forced to draw on less skilled workers than was

the case earlier in the expansion. A significant moderation in the unit cost of imported materials, likely reflecting the higher value of the dollar on foreign exchange markets, provided a notable offset to these cost pressures. On balance, it appears that firms have continued to experience upward pressures on costs. The intensity of these pressures as related to energy inputs may well diminish in coming months, but it remains to be seen how other elements of the cost structure will evolve.

This approach, while helpful in understanding the interaction of prices and costs, does not tell us how an inflation cycle begins or why it may persist. Short-run inflation impulses can originate from a variety of sources, on both the demand and the supply sides of the economy. But over longer periods of time, inflation cannot persist without at least passive support from the monetary authorities.

The strength of the inflation pressures in 1988 and into 1989 was, of course, the motive for the progressive tightening of policy that the Federal Reserve undertook over that period. And the outlook for some reduction in these pressures owes in part to that policy restraint. The associated rise in market interest rates, beginning early last year, opened up wide "opportunity" costs of holding money assets and resulted in a sharp slowing of money growth. This was especially the case for liquid deposits, whose rates were adjusted upward only very sluggishly, providing depositors with strong incentives to economize on balances.

In addition to the effect of interest rates, several special factors played a role in slowing money growth and boosting velocity--that is, the ratio of nominal GNP to money. Probably the most important of these was the unexpectedly large size of personal tax liabilities in April. Many individuals evidently were surprised by the size of their liabilities, and drew down their money balances below normal levels to make the required payments. As the IRS cashed those checks, M2 registered outright declines.

The difficulties of the thrift industry also may have affected M2 growth. Late last year, as public attention increasingly focused on the financial condition of the industry and its insurance fund, FSLIC-insured institutions began to lose deposits at a significant rate. These deposit withdrawals were particularly strong in the first quarter of this year, and while most of the funds apparently were repositioned within M2--at commercial banks or money funds--this factor likely also had some damping effect on that aggregate.

More recently, growth of the broader monetary aggregates has picked up markedly. The restraint imposed by the earlier rise in market interest rates is fading, and households appear to be rebuilding their tax-depleted balances. As of May, M2 had risen at just a 1 percent rate from its fourth-quarter base, but the 6-3/4 percent rate of growth in June lifted the year-to-date increase to around a 2 percent rate, still somewhat below its 3 to 7 percent annual target cone. M3 rose at a 3-1/2 percent rate through June, at the lower end of its range. The latest data on these aggregates suggest that relatively rapid expansion has continued into July.

M1, which is the most interest-sensitive of the monetary aggregates, declined at a 3-1/2 percent rate through June. The unusual drop in M1 stemmed from sizable declines in NOW accounts and demand deposits. NOW accounts were reduced both by the large personal tax payments this spring and by the high level of interest rates, which drew savings-type balances instead toward market instruments or other types of accounts whose offering rates adjusted upward more quickly. The decline in demand deposits was related in part to a reduction in balances that businesses are required to hold to compensate their banks for various services; for a set amount of services, higher market rates translate into lower required balances.

Monetary Policy and the Economy into 1990

Looking ahead at the remainder of 1989 and into 1990, recent developments suggest that the balance of risks may have shifted somewhat away from greater inflation. Even so, inflation remains high--clearly above our objective. Any inflation that persists will hinder the economy's ability to perform at peak efficiency and to create jobs. Consequently, monetary policy will need to continue to focus on laying the groundwork for gradual progress toward price stability. Such an outcome need not imply a marked downturn in the economy, and policy will have to be alert to any emerging indications of a cumulative weakening of activity. However, progress on inflation and optimum growth over time also require that our productive resources not be under such pressures that their prices continue to rise without abating. In light of historical patterns of labor and capital growth and productivity, this progress very likely will be associated with a more moderate, and hence sustainable, expansion in demand than we experienced in 1987 and 1988.

At its meeting earlier this month, the Federal Open Market Committee determined that a combination of continued economic growth and reduced pressures on prices would be promoted by growth of money and debt in 1989 within the annual ranges that were set in February. Moreover, it

tentatively decided to maintain these same ranges through 1990.

The specified ranges, both for this year and next, retain the 4-percentage-point width first instituted for the broader aggregates in 1988. Considerable uncertainties about the behavior of money and credit remain, and the greater breadth allows for a range of paths for these aggregates as financial and economic developments may warrant. Uncertainties about the link between the narrow transactions aggregate, M1, and the economy have, if anything, increased, and the Committee once again did not specify a range for this aggregate.

In view of the apparent variability, particularly over the short run, in the relationships between the monetary aggregates and the economy, policy will continue to be carried out with attention to a wide range of economic and financial indicators. The complex nature of the economy and the chance of false signals demand that we cast our net broadly--gathering information on prices, real activity, financial and foreign exchange markets, and related data.

While the monetary aggregates may not be preeminent on this list, they always receive careful consideration in our policy decisions. This is especially true when they exhibit unusual strength or weakness relative to past patterns and relative to our announced ranges. Thus, the very sluggish growth in M2 for the year to date was an important influence in the decision to ease policy in June and again in July. Velocity may vary considerably over a few quarters, but the provision of liquidity, as measured by one or another of the monetary aggregates, is an important factor in the performance of the economy over the shorter run and over the long run broadly determines the rate of price increase.

Although M2 currently remains below its 1989 target cone, it has picked up substantially. The decline in interest rates in recent months, along with the continued growth of income, should provide support for that aggregate over the rest of the year, helping to lift it into the lower part of its target range. Growth in M2 likely will be augmented by a cessation of the special influences I noted earlier that depressed it in the first half of the year. In particular, we expect households to continue to rebuild their money balances after the tax-related drawdowns in April and May. Also, deposit withdrawals from thrift institutions have subsided, and enactment of legislation that restores full confidence in the industry would bode well for deposit flows into FSLIC-insured institutions.

Further steps in the resolution of the thrift industry difficulties also have implications for M3. With deposits flowing in again, thrifts will not have to rely so

heavily on the Federal Home Loan Banks for their funding as they did earlier this year. Partly as a result, we expect M3 to strengthen from its rate of growth over the first half of the year, moving up into the middle of its target range by year-end.

Our outlook for debt growth foresees little change from the pace of the first two quarters. The broad credit measure that we monitor, the debt of domestic nonfinancial sectors, has grown at about an 8 percent rate this year, near the midpoint of its 6-1/2 to 10-1/2 percent range. We have little reason to expect its growth through the end of the year to be very different, implying some slowing from the pace of 1988. Nevertheless, the expansion of debt is likely to exceed nominal GNP growth again this year.

Growth of money and debt within the 1989 ranges is expected to be consistent with nominal GNP rising this year at a pace not too far from last year's increase, according to the projections of FOMC members and other presidents of Reserve Banks. These projections, however, incorporate somewhat more inflation and less real growth than we experienced in 1988. The central tendency of the projections of 2 to 2-1/2 percent real GNP growth over the four quarters of this year implies continued moderate economic growth throughout the year. For the year as a whole, these projections anticipate that growth is likely to be strongest in the investment and export sectors of the economy, with expansion of consumer expenditures and government purchases rather subdued.

A sectoral pattern of growth such as this would in fact serve the nation's longer-term needs by contributing to a better external balance. Fundamentally, improvement in our international payments position requires productivity-enhancing investment and a higher national saving rate. In this regard the federal government can play a significant, positive role by reducing the budget deficit.

The outlook for inflation this year, as reflected in the central tendency of the projections expressed at the FOMC meeting, is for a 5 to 5-1/2 percent increase in the consumer price index. A figure in this range would represent the highest annual inflation rate in the United States since 1981; this is a source of concern to the Federal Reserve. Yet this rate is below that experienced in the first six months. This implies a considerable slowing over the remainder of the year, reflecting earlier monetary policy restraint and a prospective moderation in food and energy prices.

Federal Reserve policy is focused on laying the groundwork for more definite progress in reducing inflation pressures in 1990, while continuing support for the economic expansion. The ranges provisionally established for growth

of money and debt next year are consistent with these intentions. They allow for a noticeable pickup in money growth from that likely to prevail this year, should that be appropriate. If pressures on prices and in financial markets are less intense than in recent years, velocity would not be expected to continue to increase, and faster money growth, perhaps in the top half of the range, would be needed for a time to support economic growth. Conversely, if price pressures prove intractable, the ranges are low enough to permit the needed degree of monetary restraint.

Thus, although the 1990 ranges do not represent another step in the gradual, multiyear lowering of ranges, the Federal Reserve's intent to make further progress against inflation remains intact. Uncertainties about the outlook suggested a pause in the process of reducing the ranges; however, the Committee recognizes that our goal of price stability will require additional downward adjustments in these ranges over time. Of course, as we draw closer to 1990, the economic and financial conditions prevailing will become clearer, allowing us to approach our decisions on the ranges with more confidence. Hence, the current ranges for money and credit growth in 1990 should be viewed as very preliminary.

The economic projections for 1990 made by the governors and Reserve Bank presidents center in a range of

1-1/2 to 2 percent real GNP growth and 4-1/2 to 5 percent inflation for next year. Naturally, as I've already noted, there are considerable uncertainties surrounding forecasts for 1990. In particular, developments in the external sector will depend in part on economic activity abroad, as well as on the efforts of U.S. firms to become more competitive in world markets. Domestically, performance will be affected by a large number of influences, including importantly the budget deficit.

Monetary Policy in Perspective

The Federal Reserve is committed to doing its utmost to ensure prosperity and rising standards of living over the long run. Given the powers and responsibilities of the central bank, that means most importantly maintaining confidence in our currency by maintaining its purchasing power. The principal role of monetary policy is to provide a stable backdrop against which economic decisions can be made. A stable, predictable price environment is essential to ensure that resources can be put to their best use and ample investment for the future can be made.

In the long run, the link between money and prices is unassailable. That link is central to the mission of the Federal Reserve, for it reminds us that without the acquiescence of the central bank, inflation cannot take root.

Ultimately, the monetary authorities must face the responsibility for lasting price trends. While oil price shocks, droughts, higher taxes, or new government regulations may boost broad price indexes at one time or another, sustained inflation requires at least the forbearance of the central bank. Moreover, as many nations have learned, inflation can be corrosive. As it accelerates, the signals of the market system lose their value, financial assets lose their worth, and economic progress becomes impossible.

Thankfully, this bleak scenario is not one that we in the United States are confronting. We do, however, face a difficult balancing act. The economy has prospered in recent years: the economic expansion has proven exceptionally durable, employment has surpassed all but the most optimistic expectations, and the underlying inflation rate, after coming down quickly in the early 1980s, has accelerated only modestly. But now signs of softness in the economy have shown up.

Accordingly, it is prudent for the Federal Reserve to recognize the risk that such softness conceivably could cumulate and deepen, resulting in a substantial downturn in activity. We also recognize, however, that a degree of slack in labor and product markets will ease the inflationary pressures that have built up. So our policy, under current circumstances, is not oriented toward avoiding a slowdown in demand, for a slowing from the unsustainable rates of 1987 and 1988 is probably unavoidable. Rather what we seek to avoid is an unnecessary and destructive recession.

The balance that we must strike is to support moderate growth of demand in the near term, while concurrently progressing toward our longer-run goal of a stable price level. Admittedly, the balance we are seeking is a delicate one. I wish I could say that the business cycle has been repealed. But some day, some event will end the extraordinary string of economic advances that has prevailed since late 1982. For example, an inadvertent, excess accumulation of inventories or an external supply shock could lead to a significant retrenchment in economic activity.

Moreover, I cannot rule out a policy mistake as the trigger for a downturn. We at the Federal Reserve might fail to restrain a speculative surge in the economy or fail to recognize that we were holding reserves too tight for too long. Given the lags in the effects of policy, forecasts inevitably are involved and thus errors inevitably arise. Our job is to keep such errors to an absolute minimum. An efficient policy is one that doesn't lose its bearings, that homes in on price stability over time, but that copes with and makes allowances for any unforeseen weakness in economic activity. It is such a policy that the Federal Reserve will endeavor to pursue.

For use at 10:00 a.m., E.D.T.
Thursday
July 20, 1989

Board of Governors of the Federal Reserve System

Monetary Policy Report to Congress Pursuant to the Full Employment and Balanced Growth Act of 1978

July 20, 1989

Letter of Transmittal

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM
Washington, D.C., July 20, 1989

THE PRESIDENT OF THE SENATE
THE SPEAKER OF THE HOUSE OF REPRESENTATIVES.

The Board of Governors is pleased to submit its Monetary Policy Report to the Congress pursuant to the Full Employment and Balanced Growth Act of 1978.

Sincerely,
Alan Greenspan, Chairman

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Section 1: Monetary Policy and the Economic Outlook for 1989 and 1990

As 1989 began, a reduction in inflationary pressures appeared essential if the ongoing economic expansion was to be sustained. Monetary policy during 1988 had been directed toward reducing the risks of an escalation of inflation and inflation expectations, but at the time of the Board's report to the Congress in February of this year, success in that effort seemed far from assured.

Indeed, among the data reported in the early part of 1989 were very large increases in the producer and consumer price indexes, reflecting not only the effects of run-ups in oil and agricultural commodity prices, but also broader inflationary developments, including unfavorable trends in unit labor costs over the preceding year. Under the circumstances, with pressures on productive resources still intense, monetary policy was tightened further. Reserve availability was curtailed through open market operations, and the discount rate was raised ½ percentage point in late February. In response to these policy actions, and to expectations that additional tightening moves might be needed, market interest rates climbed throughout the first quarter, and money growth was subdued.

Over the course of the second quarter, a number of indicators suggested the emergence of conditions that were more conducive to a future easing of inflationary pressures. Growth of the monetary aggregates weakened further, with M2 running noticeably below its target range for the year. Aggregate demand for goods and services moderated, reducing somewhat the strains on productive resources, especially in the industrial sector of the economy. The dollar exhibited considerable strength on the foreign exchange markets, portending a direct reduction in price pressures and slower growth in demands on domestic production capacity. Although the unemployment rate remained essentially unchanged in the neighborhood of 5¼ percent – the lowest level since the early 1970s – trends in wages and total compensation showed little, if any, further step-up, reflecting at least in part an awareness among workers and management of the need to contain costs in a highly competitive world economy. Meanwhile, prices of actively traded industrial commodities leveled out, enhancing the prospects of a broader slackening in the pace of inflation.

In this environment, interest rates turned down during the spring, as financial market participants responded not only to the better outlook for inflation but also in anticipation of an easing of monetary restraint by the Federal Reserve. The System began to provide reserves slightly more generously through open market operations at the beginning of June, and took an additional small easing step in early July. This helped bring about a further decline in market rates of interest, which by mid-July generally had more than retraced the increases that had occurred earlier in the year. Most short-term interest rates were down about ½ percentage point from their December levels, while long-term rates had fallen as much as 1 percentage point on balance.

Monetary Objectives for 1989 and 1990

In February, the Federal Open Market Committee specified a range for M2 growth in 1989 that was a full percentage point below that of 1988 and ranges for M3 and debt that were ½ percentage point below those of the prior year. This was the third consecutive year in which the ranges had been lowered. At the same time, the Committee recognized that, in light of the continuing uncertainty regarding the shorter-term relation between monetary growth and changes in income and spending, a variety of indicators of inflation pressures and economic activity as well as the behavior of the aggregates would have to be considered in determining policy.

In February, the Committee had anticipated relatively slow money growth over the first half of the year, because of the effects of the firming of policy through late 1988 and into 1989. In addition to the influence of the higher interest rates on desired holdings of money, however, several special factors – including the difficulties of the thrift industry and a drawdown of liquid assets to meet unusually large individual tax payments – appear to have further reduced money balances in the first half. These factors contributed to a substantial rise in velocity, the ratio of nominal GNP to the stock of money.

By June, money growth had picked up. Nonetheless, M2 ended the quarter just 2 percent at an annual rate above the fourth quarter of last year, compared with its 3 to 7 percent annual growth range. In June, M3 was at the lower end of its 3½ to 7½ percent annual range. The rate of expansion of domestic nonfinancial sector debt also slowed in the first half of this year compared with 1988, though by less than the monetary aggregates; debt has grown about 8 percent so far this year, near the middle of its 6½ to 10½ percent monitoring range.

At its meeting earlier this month, the Committee agreed to retain the current ranges for growth of money

Ranges of Growth for Monetary and Credit Aggregates

Percent change, fourth quarter to fourth quarter	1988	1989	Provisional for 1990
M2	4 to 8	3 to 7	3 to 7
M3	4 to 8	3½ to 7½	3½ to 7½
Debt	7 to 11	6½ to 10½	6½ to 10½

and debt in 1989. The Committee anticipates that by the fourth quarter all three aggregates will be well within those ranges. The more rapid growth in M2 and M3 already evident since mid-May is expected to extend through the second half. The recent declines in short-term market interest rates have made M2 holdings more attractive, tending to offset the restraining effects on M2 of previous interest rate increases. With M2 expansion likely also to be boosted by a further replenishing of liquid balances depleted by tax payments, this aggregate is expected to grow a little faster than nominal GNP in the second half, bringing it into the lower portion of its annual growth range. The faster growth of M2 should show through at least in part to a quickening in M3 growth over the second half of the year, so that this aggregate would move into the middle part of its range. Domestic nonfinancial debt is likely to remain in the middle portion of its range through year-end.

For 1990, the Committee provisionally decided to use, for all three aggregates, the same growth ranges in force for 1989. The Committee recognized that the economic and financial outlook over the next year and a half is uncertain; in particular, it is unclear at this juncture whether the velocities of M2 and M3 are more likely to trend higher or lower next year. Although the Committee's initial assessment is that growth of money and credit through 1990 within the bounds of the reduced ranges of this year likely would foster the slower inflation and sustained real economic expansion that it is seeking, it will reevaluate the ranges next February in light of the unfolding economic and financial situation. The outlook for spending, prices, and financial markets in 1990 should have clarified somewhat by then, as should the influence on monetary expansion of the ongoing resolution of thrift industry problems. For the long term, the Committee recognized that ultimate attainment of price stability will require that the ranges for money and credit growth be reduced further in future years.

Economic Projections for 1989 and 1990

Voting members of the Committee and other Reserve Bank presidents believe that the monetary ranges specified are consistent with some progress in reducing inflation, which likely will be associated in the near term with continuation of a slower pace of economic growth. The central tendency of the forecasts is for increases in real GNP of 2 to 2½ percent in 1989 and of 1½ to 2 percent in 1990.

The expected easing of pressures on resources should contribute to a damping of inflation in 1990, although the Board members and Bank presidents also are anticipating some near-term relief from the special problems that boosted prices in the first half of this year. Larger crops later this year should result in more favorable behavior of food prices, and the recent peaking of crude oil prices suggests the likelihood of some softening in consumer energy prices. Thus, retail inflation should be considerably slower over the remainder of this year, and the central tendency of CPI forecasts for 1989 as a whole is 5 to 5½ percent—compared with the more than 6 percent rate observed through May. The forecasts for the CPI in 1990 center on 4½ to 5 percent.

The Administration's economic forecast, presented in connection with its mid-session update of the budget outlook, does not differ greatly from the projections of the FOMC members. Nominal GNP is near the upper end of the FOMC central-tendency ranges for 1989 and 1990, but with a more favorable mix of real output versus inflation, especially in 1990. There appears to be no basic inconsistency between the policy objectives of the Federal Reserve and the economic forecast of the Administration; indeed, the Administration has indicated that it shares the view that the maintenance of anti-inflationary monetary policy is a precondition for healthy economic expansion.

In an environment of relatively slow overall growth, such as is expected by the FOMC members, some

Economic Projections for 1989 and 1990

	FOMC Members and Other FRB Presidents		Administratio
	Range	Central Tendency	
1989			
Percent change, fourth quarter to fourth quarter			
Nominal GNP	5 to 7¾	6 to 7	7.1
Real GNP	1½ to 2¾	2 to 2½	2.7
Consumer price index	4½ to 5¾	5 to 5½	4.9[1]
Average level in the fourth quarter, percent			
Civilian unemployment rate	5 to 6	Around 5½	5.3[2]
1990			
Percent change, fourth quarter to fourth quarter			
Nominal GNP	4¼ to 7½	5½ to 6¾	6.8
Real GNP	1 to 2½	1½ to 2	2.6
Consumer price index	3 to 5¾	4½ to 5	4.1[1]
Average level in the fourth quarter, percent			
Civilian unemployment rate	5 to 6½	5½ to 6	5.4[2]

[1] CPI-W. FOMC forecasts are for CPI-U.

[2] Percent of total labor force, including armed forces residing in the United States.

industries and regions are likely to experience setbacks, but major imbalances that could threaten the continuation of the economic expansion are not anticipated. In the household sector, growth of consumer purchases has been sluggish and may remain so for a while. Residential construction activity should pick up some in coming months, in response to the recent decline of mortgage rates, although an overhang of supply in some locales could damp the recovery. Surveys of business plans suggest that capital spending will post further gains over the remainder of 1989, but some moderation from first-half growth rates is to be expected in light of declining levels of capacity use and the recent weakening in corporate profits. Spending on equipment is likely to continue to be buoyed by the desire to modernize industrial facilities, so as to enhance efficiency and meet intense competition here and abroad.

The external sector represents an area of considerable uncertainty in the economic outlook for the next year and a half. Real net exports of goods and services increased earlier this year, but improvements may be more difficult to achieve in the period ahead as the effects of past depreciation of the dollar wear off and are offset by those associated with the more recent appreciation. In addition, the path of exports will depend importantly on economic growth abroad, which may slow as a result of policy actions taken by some of our major trading partners to offset mounting inflationary pressures. Ultimately, achievement of the adjustment needed in the external sector will depend not only on governmental policies that foster macroeconomic stability, but also on the determination of U.S. firms to meet foreign competition through application of stringent cost controls and intensified marketing efforts abroad.

A key ingredient in maintaining a healthy pace of economic expansion is further progress in reducing the federal budget deficit. Since 1983, the deficit has fallen relative to GNP from more than 6 percent to around

3 percent, but it remains large by historical standards. Taking the actions required to meet the Gramm-Rudman-Hollings targets on schedule will foster confidence in the U.S. economy, particularly among financial market participants. At the same time, reduced demands by the federal government for credit will free up the available supply to interest-sensitive private sectors, such as housing and business investment. The Committee thus views as highly encouraging the commitments expressed by the Congress and the Administration to begin soon to address the problems of meeting the fiscal 1991 budget target.

Section 2: The Performance of the Economy during the First Half of 1989

After two years of rapid expansion, economic activity decelerated substantially in the first half of 1989. Even at this more moderate pace of growth, however, job creation was considerable—nearly 1½ million between December and June—and the civilian unemployment rate, fluctuating around 5¼ percent, remained in the lowest range since the early 1970s.

Inflation rose in the first half of 1989, but most of the increase appears to have resulted from transitory events. In particular, energy prices increased sharply, as the rise in crude oil prices between November 1988 and May 1989 was passed through, and food prices surged as the agriculture sector continued to experience adverse supply developments. Outside food and energy, the rate of inflation has, on average, remained at about its 1988 pace, even in the face of relatively high levels of resource utilization.

This apparent stability of underlying price trends is attributable in part to the appreciation of the dollar on exchange markets. So far in 1989, prices of imported goods other than oil have been virtually flat on average, restraining increases in the prices of domestically produced items. In addition, despite the tightest labor markets in some time, wage trends have been fairly stable, helping to limit the acceleration in unit labor costs during a period in which productivity has weakened.

The External Sector

Developments in foreign exchange markets have played an important role in shaping events in the domestic economy in recent years. After depreciating over most of the period from 1985 to late 1987, the foreign exchange value of the dollar in terms of other G-10 currencies changed little, on net, in 1988, as a decline in the final few months reversed much of the increase that had occurred earlier in the year. In December the dollar began to rebound, and it rose substantially through mid-June before dropping back somewhat. The appreciation of the dollar through the first half of 1989 was frequently met by concerted intervention sales of dollars by U.S. and foreign monetary authorities.

During December, and in the first quarter of this year, the dollar rose in response to perceptions of a relative tightening of U.S. monetary policy. Reports of somewhat higher rates of inflation and news about the strength of the economy contributed to expectations that Federal Reserve policy would be tightened still further. There was a brief pause in the dollar's rise after the Group of Seven finance ministers and central bank governors stated in April that a further rise in the dollar that undermined the adjustment process would be counterproductive.

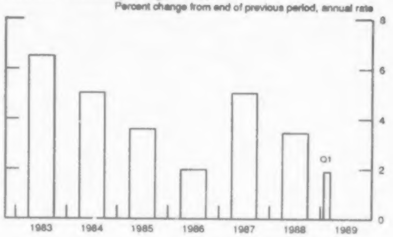
In May and early June, the dollar appreciated significantly on balance, even though interest rates on nondollar assets rose relative to those on dollar-denominated instruments. Sentiment in favor of the dollar was, perhaps, partly a response to concerns about political events abroad, but the data on the U.S. trade balance, which were better than expected, also may have played a role. For a while, the dollar's rise appeared to be associated with expectations of capital gains on U.S. stocks and bonds. Since mid-June, the dollar has retraced much of its second-quarter rise, under the influence of increasing interest rates abroad, declines in dollar rates, and some easing of demands for dollar assets after the initial response to political uncertainties in certain other countries.

Measured in terms of a trade-weighted average of the other G-10 currencies, the dollar is about 8 percent higher than in December 1988 and about 12 percent higher than in December 1987. After adjustment for changes in relative price levels, the appreciation of the dollar has been larger, because U.S. inflation has remained above the average for the other G-10 countries. Meanwhile, the currencies of South Korea and Taiwan have risen moderately against the dollar so far in 1989.

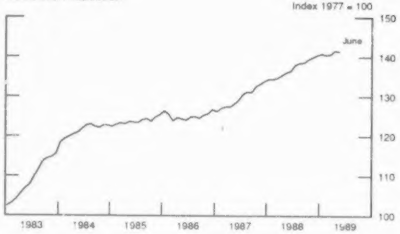
In most of the other industrial countries, economic growth has been strong. The resulting very high rates of capacity utilization and the diminishing slack in labor markets, together with higher world oil prices and special factors, have spurred an appreciable pickup in inflation abroad in recent quarters. Policymakers in many foreign industrial countries have responded by raising official interest rates. Growth of the newly industrializing economies in Asia has slowed recently, though the rates remain relatively high. In contrast, developing countries that are burdened with large external debts have continued to struggle to achieve sustained economic growth.

The U.S. merchandise trade deficit in the first quarter was $110 billion at a seasonally adjusted annual rate, significantly better than the figure for the fourth quarter and that for 1988 as a whole. In the first two months of the second quarter, the trade deficit was essentially unchanged from the first-quarter pace.

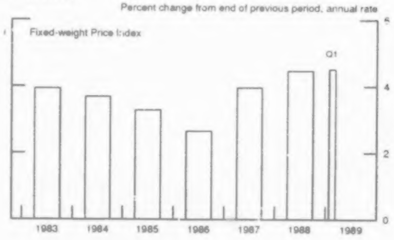
Real GNP - Excluding Drought Effects



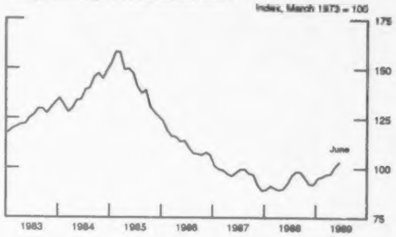
Industrial Production



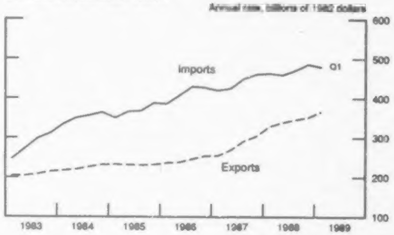
GNP Prices



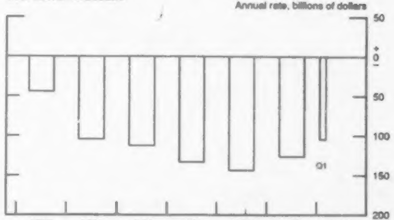
Foreign Exchange Value of the U.S. Dollar *



U.S. Real Merchandise Trade



U.S. Current Account



* Index of weighted average foreign exchange value of U.S. dollar in terms of currencies of other G-10 countries plus Switzerland. Weights are 1972-76 global trade of each of the 10 countries.

Exports have continued to expand this year, although not so rapidly as in 1988. Export gains have been broadly based, with notable increases for agricultural goods, industrial supplies, capital goods, and consumer goods. Meanwhile, imports have increased moderately; in fact, average imports of products other than petroleum in April and May were less than 1 percent above their fourth-quarter rate. Notable decreases were recorded in imports of consumer goods and automotive products. So far in 1989, the value of oil imports has risen sharply, as higher prices for petroleum and petroleum products were accompanied by a small increase in physical volume. The further improvement in the U.S. trade balance in the first five months of this year reflects a number of factors, most importantly the strength of economic activity abroad, the slower growth of U.S. activity, the continuing, if diminished, benefit for U.S. price competitiveness from the depreciation of the dollar through the end of 1987, and the restraint that the recent rise in the dollar placed on prices of non-oil imports.

The current account deficit widened in the first quarter to $123 billion. The increase from the fourth-quarter rate was more than accounted for by capital losses on assets denominated in foreign currencies resulting from the dollar's appreciation. Setting aside those losses, the current account balance in the first quarter showed a deficit of $108 billion, an improvement of about $22 billion from the previous quarter. Nearly all of this improvement resulted from the narrowing of the trade deficit. Preliminary information on capital transactions in the early months of 1989 suggests an increase in net private foreign purchases of U.S. Treasury securities and corporate bonds and substantial foreign direct investment in the United States.

The improvement in real net exports accounted for nearly half of the overall rise in the GNP during the first quarter, more than reversing its negative contribution in the fourth quarter. The contribution to GNP growth in the second quarter probably was negligible, however, as real net exports may have begun to be depressed by the loss in U.S. price competitiveness associated with the cumulative rise in the dollar since the end of 1987.

The Household Sector

Much of the slowing in overall economic growth in the first half of 1989 reflected a deceleration in consumer spending. The slump in demand was fairly broad, encompassing a variety of durable and nondurable goods. Despite the widespread availability of special financing deals and other incentives, sales of motor vehicles in the first half were about 6 percent below the pace of 1988 as a whole. A weakening in purchases of furniture and appliances likely was related in part to the drop in home sales.

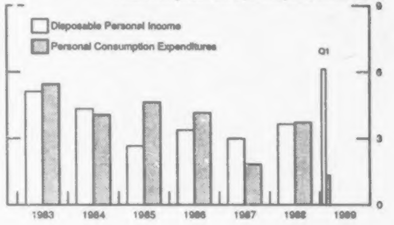
Consumption slowed against a backdrop of strong income growth in the early part of the year, although weaker income growth was evident in the spring. Personal income gains in the first quarter were accentuated by the national income accountants' assumption that the income of farm proprietors would return to normal levels over the year, after the drought-induced reductions in 1988. With hiring down in the spring, increases in wages and salaries softened noticeably, showing virtually no growth in real terms. Also, growth of the nonwage components of personal income was weaker on balance in the second quarter.

The personal saving rate has been on a distinct upswing since reaching a forty-year low in mid-1987. Several explanations have been propounded for the recent rise, among them the lower level of household net worth relative to income since the stock market break of 1987, higher costs of consumer credit (especially in aftertax terms, because of the phase-down of interest deductibility), and concerns about a potential softening of the economy. Whatever the cause, households appear to have adopted a more cautious spending stance, though it also should be noted that the personal saving rate has remained below the norms of the 1960s and 1970s.

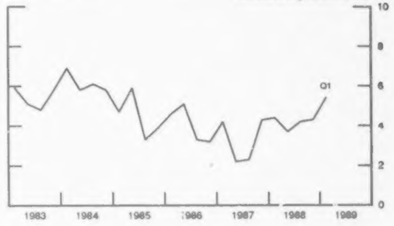
Residential construction declined over the first half in response to the rise in interest rates and to earlier overbuilding in some markets. The more recent drop in rates, which began in May, likely will be reflected in some improvement in construction over the summer and fall. Total housing starts, at an average annual rate of 1.44 million units through May, were down 3¼ percent from their 1988 pace.

Starts in the single-family sector averaged about 1 million units at an annual rate between March and May, a period relatively free from the weather-related distortions that affected construction in January and February. Interest rates on fixed-rate mortgages rose above 11 percent for the first time since 1985, with part of the rise attributable to investor concerns about sizable future liquidations of mortgage assets by troubled thrift institutions. Also, rates on adjustable-rate mortgages rose nearly a full percentage point during the early months of 1989, as discounting of initial interest rates on ARMs was reduced. In recent years, relatively low initial terms on ARMs led an increasing number of households to favor this instrument for home purchases. Since their highs in the spring, interest rates on ARMs have fallen more than ½ of a percentage point,

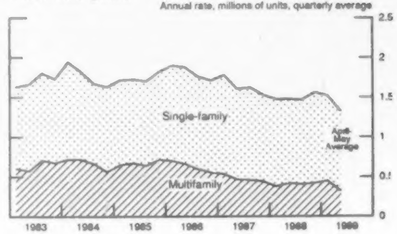
Real Income and Consumption



Personal Saving



Private Housing Starts



while fixed-rate mortgage rates have dropped about 1¼ percentage points.

Meanwhile, multifamily starts fell further in the first half of the year from the already low level recorded in 1988. Multifamily housing production has been limited by an overhang of vacant rental units. Moreover, building in this sector continues to reflect the effects of the Tax Reform Act of 1986, which, by curtailing many of the financial advantages associated with investment in rental housing, sharply reduced its aftertax profitability.

The Business Sector

In contrast to the household sector, business capital spending strengthened in early 1989, responding in part to high levels of capacity utilization in the United States and to international pressures to lower costs. In the first quarter of 1989, real business fixed investment rose at an annual rate of 7½ percent, and such spending appears to have increased substantially further in the second quarter.

The gain in investment has occurred in the equipment category. Particularly noteworthy in the first quarter was a sharp rise in outlays for industrial machinery. Increases in that area, which includes spending for fabricated metal products, engines, turbines, and a variety of other types of industrial apparatus, have been exceptionally strong since mid-1987. Spending for high-technology equipment also has been robust. Computer outlays decelerated during the second half of 1988, possibly reflecting some hesitation on the part of potential purchasers in response to the rapid pace of new product announcements, but spending was up considerably in the first quarter, and another gain appears in train for the second quarter.

High levels of factory utilization apparently have spurred a rise in industrial building in recent quarters. Outlays for construction of office and other commercial buildings also rose earlier this year, although the level of total spending on commercial structures remained below that of the 1985-86 period, depressed by excess space in many areas. And, while the rise in energy prices led to some increase in oil and gas drilling in the spring, the level of activity remained very low compared with that of the early 1980s.

Inventory investment slowed over the first five months of 1989, as businesses adjusted with apparent promptness to the more moderate expansion of final demand. Inventory buildups by manufacturers have been concentrated in the aircraft and other capital goods industries, where production has risen and order backlogs are large. In contrast, in the retail sector, automobile inventories rose sharply in the first quarter and have remained high. In an effort to reduce the overhang before introducing new models in the fall, carmakers have lowered factory assembly rates and have enhanced sales incentives. Qualitative reports have suggested that stocks at some other retailers also may have risen above desired levels, although most firms appear to have been following cautious inventory policies and problems of excess stocks seem to be limited.

In the first quarter of 1989, before-tax economic profits of nonfinancial corporations declined, in part because unit labor costs increased as sales growth slowed and productivity deteriorated. The drop in profits was spread over most types of businesses; the largest decline was in the manufacturing sector, which had especially strong gains in both 1987 and 1988. Meanwhile, corporate tax liabilities edged up in the first quarter, owing in part to higher profits generated from the rise in prices of inventories. The combination of lower operating profits and higher tax liabilities reduced the internal cash flow of nonfinancial corporations.

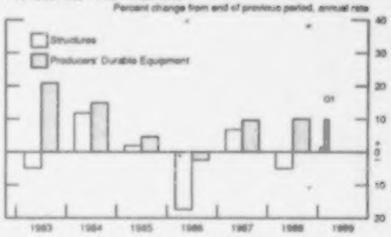
The Government Sector

In the first quarter, real federal purchases of goods and services, the part of federal outlays that is counted directly in GNP, were virtually unchanged. Such purchases are dominated by defense; nominal spending authority in this area has been virtually flat since 1985, and procurement of some major new weapon systems is winding down. As a result, real military purchases have fallen and in the first quarter were nearly 5 percent below the mid-1987 peak. The decline in defense spending has been partially offset by increases in other federal purchases. Inventories held by the Commodity Credit Corporation edged down further in the first quarter, but the rate of decline has been slowing (on a seasonally adjusted basis) since the middle of last year as the effects of last summer's drought have dissipated. Spending for the space program and for tax and immigration enforcement also has risen.

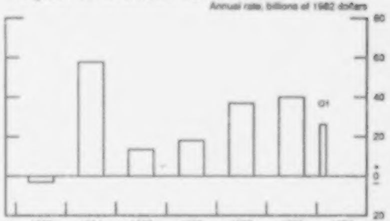
On a unified budget basis, total nominal outlays for the fiscal year through May were more than 6 percent above the comparable year-earlier total. Spending related to the thrift institution problem spiked at year-end 1988 and then dropped sharply in the first half of this year. On the other hand, growth has continued in entitlement spending (principally Medicare and Social Security) and in net interest outlays.

Federal receipts have grown even more rapidly than outlays, buoyed by increases in employment and in-

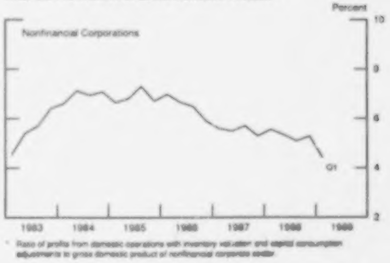
Real Business Fixed Investment



Changes in Real Nonfarm Business Inventories



After-tax Profit Share of Gross Domestic Product *



* Ratio of profits from domestic operations with inventory valuation and capital consumption adjustments to gross domestic product of nonfinancial corporate sector.

come. In addition, there was an extraordinary spurt in nonwithheld tax collections in April and May, the sources of which are at this point uncertain. Some possible explanations relate to the Tax Reform Act of 1986 and include greater-than-anticipated effects from its base-broadening provisions and a shifting of income from earlier years into 1988, when the reduction in personal tax rates was fully phased in. In addition, realizations of taxable capital gains may have been hefty last year because of the large number of corporate mergers and leveraged buyouts. All told, receipts thus far in 1989 are 10 percent above year-earlier levels, and the Administration now projects that the total budget deficit for FY1989 will be $148 billion, compared with the $155 billion recorded in FY1988.

Real purchases of goods and services by state and local governments have been on a moderate uptrend this year. Outlays for personnel and construction in the education and law enforcement areas have been subject to considerable upward pressure. Some other expenditures have risen because of federal mandates, especially those in recent health legislation. As in the federal sector, growth of state and local outlays has been tempered by budgetary pressures; excluding retirement trust funds, which are running a large surplus, the sector had a deficit of about $17 billion at an annual rate in the first quarter. Revenue experience was favorable this spring, however, as a significant number of states reported personal income tax receipts that were larger than expected.

Labor Markets

Job growth was substantial over the first half of 1989, though it slowed in the spring. In the first quarter, additions to nonfarm payrolls averaged 264,000 a month, about the same pace seen over the prior two years. By spring, hiring had begun to slow, and payroll employment growth dropped back to 200,000 per month in the second quarter as a whole. Even at this reduced rate, however, job gains were larger than are likely to be sustained, given the underlying trend in labor force growth. Manufacturing employment declined in the second quarter, while the number of construction jobs was about unchanged. Growth of employment moderated in the service-producing sectors, where advances have been the largest over the course of this business expansion.

The moderation in the growth of the demand for labor in the second quarter did not lead to any appreciable reduction in labor market tightness. The unemployment rate has fluctuated between 5.0 and 5.4 percent thus far this year; in June it stood at 5.3 percent. Although many Americans remain involuntarily unemployed, the difficulty of matching workers with jobs – given skill and locational considerations – is much greater than it was earlier in the expansion.

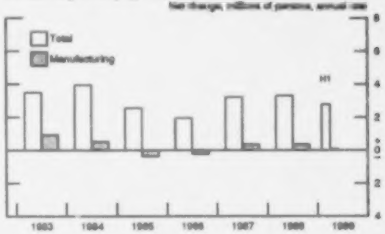
By at least one aggregate measure, the rate of increase in wages seems to have leveled off in recent quarters. Average hourly earnings of production and nonsupervisory workers accelerated from late 1986 through mid-1988; since then the rate of increase has flattened out, and in June earnings were up 3¾ percent from a year earlier. The employment cost index for wages and salaries in the private nonfarm sector, a broader measure of wages that is available only through March, indicated some easing of wage trends in the goods-producing sector; however, in the service-producing industries, the trend remained sharply upward. The cost of benefits provided to employees in the goods and services sectors rose slightly faster than wages over the year ended in March, and total compensation per hour – wages and salaries plus benefits – was up 4½ percent over that period, in the same range as the 12-month increases recorded in the preceding three quarters.

Productivity performance has deteriorated somewhat in recent quarters. In some instances, higher levels of production have forced firms to use less efficient capital and to employ less skilled labor. Output per hour in the nonfarm business sector was down in the first quarter, and virtually unchanged on a four-quarter basis. With the sizable increases in compensation over the same period, unit labor costs accelerated to a 5¼ percent annual rate, the largest year-over-year increase since late 1982. In manufacturing, the rise in unit labor costs in the year ended in the first quarter was about 1 percent; unit costs had declined earlier in the business expansion. This step-up in unit labor costs reflects a slackening in the improvement of factory productivity; compensation increases have remained moderate.

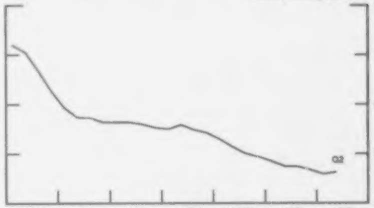
Price Developments

Inflation increased sharply in early 1989, reflecting higher costs for food and energy. The consumer price index for all items, a broad-based measure for finished goods and services, rose at an annual rate more than 6 percent through May, compared with the 4½ percent pace in 1987 and 1988. The producer price index for finished goods recorded an even more pronounced acceleration, owing to the greater importance of food and energy in that index. However, the underlying inflation trend has not deteriorated: excluding food and energy, inflation at the retail level has been running at a rate of around 4¾ percent, about the same as in 1988.

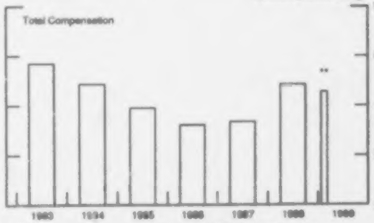
Nonfarm Payroll Employment



Civilian Unemployment Rate



Employment Cost Index *



* Employment cost index for private industry, excluding farm and household workers.
** Percent change from Q1 1988 to Q1 1989.

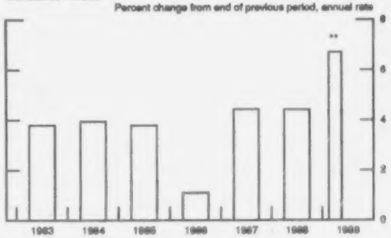
Energy prices began rising sharply last November, after the OPEC nations agreed to limit crude oil production. Subsequently, temporary supply disruptions in Alaska and in the North Sea added to price pressures. The posted price of West Texas Intermediate, the U.S. benchmark for crude oil, jumped from about $13 per barrel in November to over $19 in early May. As a result, energy prices at the producer level soared, and consumer energy prices rose nearly 25 percent at an annual rate between December and May. More recently, posted prices of crude oil have remained between $19 and $20 per barrel.

Increases in retail food prices were large in the first half of 1989, in part reflecting the lingering effects of last summer's drought and additional damage to some crops this year. From the beginning of the year through May, the rise in the CPI for food was close to 8 percent at an annual rate. Although drought curtailed the winter wheat crop for 1989, total crop acreage has expanded, and overall production should rebound this year, if weather conditions are satisfactory. In addition, meat supplies seem likely to hold fairly steady over the second half of this year. Thus, pressures from the supply side should not be a big factor in the food price outlook.

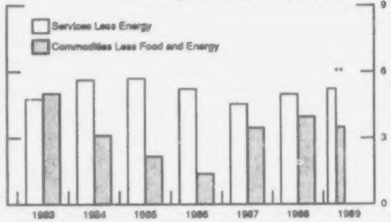
Excluding food and energy, prices for commodities at the consumer level have risen at a rate slightly lower than that recorded for 1988. A marked diminution of increases in non-oil import prices associated with the appreciation of the dollar apparently has restrained the prices of many goods, notably apparel and a variety of household items. In contrast, inflation in the service sector has increased, especially in labor-intensive services, such as medical care, entertainment, and public transportation.

At early stages of processing, prices of goods have risen little or declined in recent months. Prices for many crude industrial commodities, which had climbed sharply in 1987 and 1988 with the expansion of factory output, have softened this year. This in turn has helped hold down the increase in prices at the intermediate level of production; the producer price index for intermediate materials, excluding foods and energy, was unchanged on net in the second quarter.

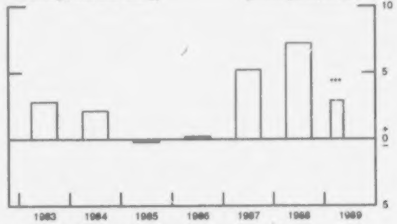
Consumer Prices *



Consumer Prices Excluding Food and Energy *



Producer Prices for Intermediate Materials Excluding Food and Energy



* Consumer Price Index for all urban consumers.
** Percent change from December 1988 to May 1989.
*** Percent change from December 1988 to June 1989.

Section 3: Monetary Policy and Financial Developments during the First Half of 1989

In conducting monetary policy over the first half of the year, the Federal Open Market Committee continued its effort to foster long-run price stability, so as to build a base for sustainable expansion of the economy. In again reducing the ranges for money and debt growth at its February meeting, the Committee recognized that restraint on the expansion of money and credit would be needed to promote this goal.

At the same time, the Committee realized that considerable uncertainty remained about the behavior of the monetary aggregates. Relatively wide monetary ranges—4 percentage points in breadth—were retained, in part to take account of the substantial interest-rate sensitivity of money demand over horizons of as long as a year and of the unpredictable effects on money demand of the resolution of the crisis in the thrift industry. Moreover, in these circumstances, the Committee recognized that, in addition to the behavior of the monetary aggregates, a variety of indicators of inflationary pressures and the course of economic activity would have to be taken into account in shaping policy over 1989.

The Implementation of Monetary Policy

As noted previously, developments early in 1989 suggested that a worrisome risk remained that inflation was picking up and could become more deeply embedded in the economy. Wage and benefit costs had accelerated in 1988, and the readings for the consumer and producer price indexes were troubling. Extending the move toward restraint that began almost a year earlier, the Federal Reserve increased reserve market pressures at the start of this year and again in mid-February. On February 24 the discount rate was raised ½ percentage point to 7 percent.

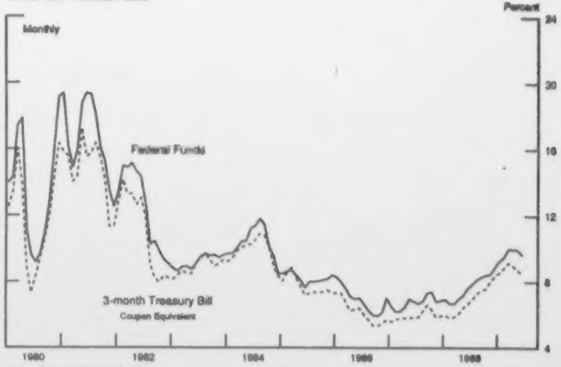
These policy actions were accompanied by marked increases, of about a percentage point, in most short-term interest rates. Yields on long-term securities also moved up, but by considerably less than short-term rates. The foreign exchange value of the dollar strengthened as interest rates in the United States rose relative to those abroad. Money growth slowed. M1 was roughly flat in the first quarter, and M2 and M3 decelerated from already reduced rates in the second half of 1988.

By spring, the outlook for spending and prices had become more mixed. Employment growth still looked strong, indicators of capital spending suggested a rebound from the fourth quarter of 1988, and prices continued to advance rapidly. But consumer demand appeared to have moderated, industrial production was weakening, and the behavior of commodity prices and some other indicators of potential price trends suggested that inflationary momentum might begin to wane. In view of the uncertainties surrounding the outlook, and taking into account the subdued pace of money growth, the Committee left reserve market conditions unchanged through the middle of the second quarter.

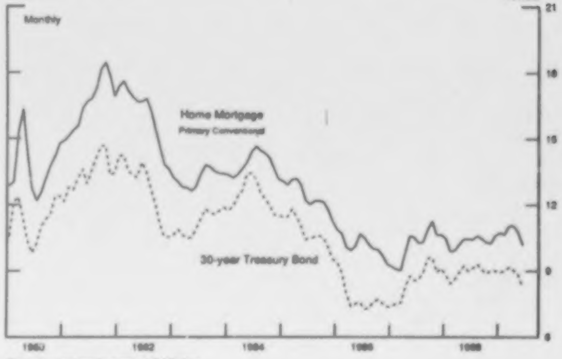
Many interest rates began to move off their March highs early in the second quarter as indications mounted of moderation in the pace of economic activity and in underlying price pressures. With the passing weeks, a considerable weakening in housing activity became evident, and incoming data showed employment to be expanding at a noticeably slower rate. Market expectations of some additional tightening of monetary policy shifted to anticipations of an easing. The ensuing decline in interest rates did not, however, prompt a drop in the foreign exchange value of the dollar. Instead, the dollar appreciated further over this period, in part because of political uncertainties abroad and in part because of data on the U.S. trade balance that were better than expected. The dollar also may have gained support for a while from expectations that the rallies in U.S. securities markets would continue. The monetary aggregates weakened further in April and early May, reflecting the drawdown of liquid balances to make personal tax payments that were larger than expected. In May, M2 fell to the lower edge of the parallel band associated with its annual target range (see chart), and M3 slipped just below the bottom of its growth cone.

The FOMC eased policy slightly at the beginning of June and again in early July. The federal funds rate moved down about ½ percentage point in two steps to around 9¼ percent. Evidence that the more moderate pace of economic activity was persisting, indicators of the behavior of wages and sensitive prices, and the weakness of the monetary aggregates all were consistent with a prospective ebbing of inflationary pressures. Moreover, the dollar was appreciably above year-end levels, which could be expected to have favorable effects in restraining inflation. While inflation remained a concern, an intensification of price pressures did not appear to be a present danger, and the risks of cumulating weakness in the economy had increased.

Short-Term Interest Rates

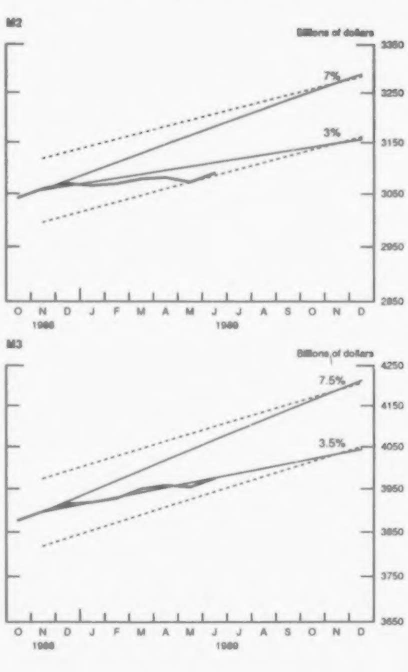


Long-Term Interest Rates



Observations are monthly averages of daily data; last observation is for June 1989.

Ranges and Actual Money Growth



Rate of Growth

1988 Q4 to 1989 Q2
1.6 Percent

1988 Q4 to June
1.9 Percent

Rate of Growth

1988 Q4 to 1989 Q2
3.4 Percent

1988 Q4 to June
3.5 Percent

Although the easing steps were largely expected, most short-term interest rates continued downward in anticipation of further monetary policy actions, more than offsetting their first-quarter rise. The bond market rallied further, leaving long-term rates by mid-July down ½ to 1 percentage point on balance from late-1988 levels. Stock prices continued their brisk upward movement, reaching post-October 1987 highs. The value of the dollar also moved down somewhat in late June and dropped further in early July; it retraced most of its rise during the second quarter, although remaining well above its level at year-end 1988.

The Behavior of the Monetary Aggregates

Growth of the monetary aggregates was quite sluggish over the first half of 1989, reflecting the effects of increases through March in market interest rates relative to returns on monetary assets, some depositor concern over the problems of the thrift industry, and large tax payments by individuals. From the fourth quarter of 1988 through June, M2 edged up at an annual rate of only 2 percent, markedly below last year's pace of 5¼ percent. M2 velocity rose sharply through the second quarter.

The deceleration of M2 in the first quarter stemmed largely from a combination of continued increases in market interest rates and unusually slow upward adjustment of rates paid on retail deposits. Yields on NOW accounts moved up only about 10 basis points over the year ended in March, while those on other liquid deposits – savings and Money Market Deposit Accounts (MMDAs) – rose about ¼ and 1 percentage point, respectively; many short-term market rates increased more than 3 percentage points over the same period. Rates on small time accounts increased much more than those on the more liquid retail deposits, but they too failed to keep up with the rise in market yields.

Some of the sluggishness in the adjustment of returns on retail deposits over this period may have reflected continued regulatory pressures on thrift institutions to moderate their pricing of deposits, as well as the closing last year of some insolvent institutions with aggressive pricing policies. More broadly, the slow upward adjustment of deposit rates, especially on accounts without fixed terms – NOW accounts, MMDAs, and savings deposits – also reflected the continued evolution of pricing strategies by depository institutions in the deregulated environment. By concentrating upward rate adjustments in small time deposits and offering more sophisticated account structures, in which larger balances receive higher rates, institutions found that they could retain the bulk of their funds while minimizing the effects of higher market rates on their overall interest expense.

Nonetheless, as yields on market instruments became increasingly attractive relative to those on deposits over the first quarter, some funds were redirected to instruments not included in the monetary aggregates. Noncompetitive tenders for Treasury bills and notes, a rough indicator of the extent to which individual investors are increasing their holdings of Treasury securities, surged early in the year and remained strong through March. The increase in demand for Treasury securities was greater than would have been expected from interest rate movements alone, suggesting that depositors' nervousness about the problems of the thrift industry were playing a role too. Although the President submitted to the Congress a comprehensive plan for resolving the industry's difficulties early in the year, and gave assurances that the U.S. government would back insured deposits fully, FSLIC-insured thrift institutions experienced large outflows of deposits throughout the first quarter. These outflows apparently depressed overall M2 growth somewhat during that period, but the bulk of the funds likely remained within the aggregate. Commercial banks experienced relatively strong growth in core deposits, and M2-type money market mutual funds, whose rates adjust relatively quickly to changes in market interest rates, saw sizable inflows of funds.

The increased opportunity costs of the first part of the year continued to damp money growth into the second quarter, but, in addition, liquid balances were drawn down to meet large April tax payments. Nonwithheld personal tax payments were $16 billion greater this April than last. The tax-related effect was manifested in a sharp drop in the liquid components of M2 in late April and into May as the payments continued to clear. Transaction accounts posted large declines, outflows of savings and MMDA balances accelerated, and inflows to money market mutual funds paused. Balances began to bounce back in late May, however, as depositors started to rebuild their holdings of monetary assets, and in June M2 grew at an annual rate of 6¼ percent.

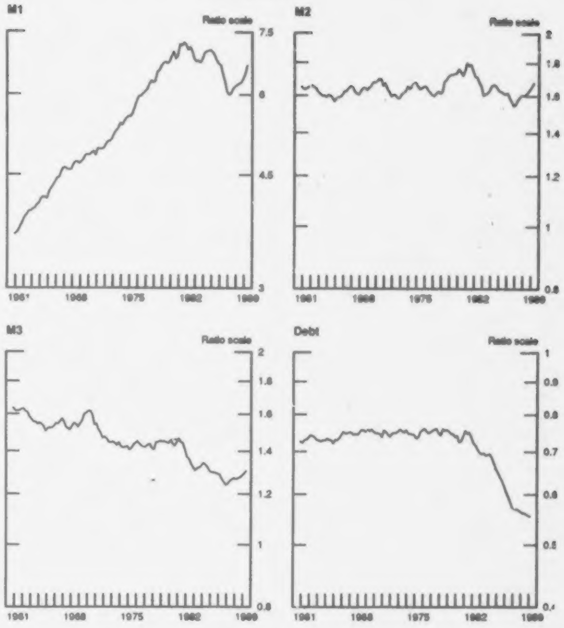
Also contributing to the rebound in holdings of money balances after mid-May were declines in opportunity costs as market interest rates headed down. Yields on small time deposits lagged this move, and returns on these deposits at times exceeded those on market instruments. Demand for Treasury securities through noncompetitive tenders fell back, and growth in small time deposits, already robust, jumped to an annual rate of more than 20 percent for the quarter. Yields on small time deposits at thrift institutions

Growth of Money and Debt *(Percent)*

		M1	M2	M3	Debt of domestic nonfinancial sectors
Fourth quarter to fourth quarter					
1979		7.7	8.2	10.4	12.3
1980		7.4	9.0	9.6	9.6
1981		5.2 (2.5)*	9.3	12.3	10.0
1982		8.7	9.1	9.9	9.0
1983		10.2	12.1	9.8	11.3
1984		5.3	7.7	10.5	14.2
1985		12.0	8.9	7.7	13.2
1986		15.6	9.3	9.1	13.4
1987		6.4	4.2	5.7	9.8
1988		4.3	5.2	6.2	8.9
Quarterly growth rates (annual rates)					
1989	Q1	−0.4	1.9	3.7	8.2
	Q2	−5.5	1.3	3.1	7.4e

*M1 figure in parentheses is adjusted for shifts to NOW accounts in 1981.
e—estimated

Velocity of Money and Debt
(Quarterly)



responded somewhat more slowly than those at banks to the downturn in market interest rates, and growth of these deposits at thrift institutions surged. Largely because of this strength in small time accounts, and because the most anxious depositors probably had already moved their funds elsewhere, overall deposit balances at FSLIC-insured thrift institutions stabilized in the second quarter.

M3 grew at an annual rate of 3½ percent from the fourth quarter of last year to June, placing it at the lower bound of its target range. In the first quarter, expansion of M3 was subject to offsetting forces. It was bolstered somewhat by bank funding needs generated by strong demand for business loans. Added demand for commercial and industrial loans stemmed both from merger-related financings and from shifts to short-term borrowing by businesses facing rising long-term interest rates and investor concerns about "event risk" – the possibility that a firm's debt obligations would be significantly downgraded in a corporate buyout or restructuring. Acting to damp M3 growth over the first quarter, however, was heavy reliance by thrift institutions on Federal Home Loan Bank advances and other borrowings, which are not included in the money stock. M3 growth edged down a bit in the second quarter with some easing of bank credit demands and strong growth in government deposits – also not included in the money stock – resulting from the large volume of tax payments. By June, however, M3 had rebounded as tax effects unwound.

Reflecting interest-rate and tax-related effects, M1 declined at an annual rate of 3½ percent from the fourth quarter of 1988 to June. Balances in other checkable deposits, which had moved down a little over the first quarter in response to higher opportunity costs, dropped substantially in late April and early May as the tax payments cleared. Demand deposits also declined on balance over the first half of the year, because opportunity costs increased and because the balances businesses are required to hold to compensate their banks for services fell. After changes in market rates of interest, banks often adjust with a lag the "earnings credit" rates used to determine the level of required compensating balances; thus, downward adjustments to compensating balances can continue for some time after market rates have stopped rising. The large personal tax payments also affected household demand-deposit balances. Late in the quarter, however, both demand and other checkable deposits began to increase, perhaps as some of the earlier influences started to be reversed with the drop in market interest rates over the second quarter.

Credit Flows

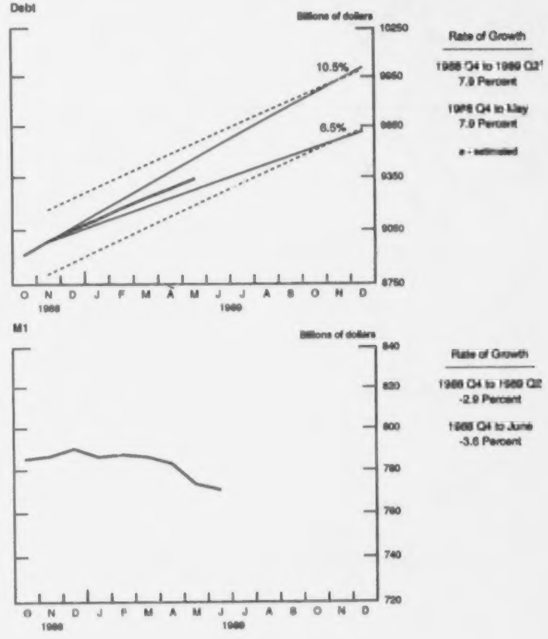
The aggregate debt of domestic nonfinancial sectors expanded at an annual rate of close to 8 percent over the first half of this year, near the midpoint of its monitoring range and down somewhat from its 1988 pace. The growth of federal sector debt slowed as tax receipts surged. Expansion of the debt of nonfederal sectors also moderated, partly in response to higher levels of market interest rates over much of the first half of the year. Household borrowing in mortgage markets slowed as increases in lending rates damped housing demand, while the pace of consumer borrowing slackened along with the deceleration in consumption spending.

Mortgage lending by thrift institutions did not appear to be unusually weak in the first few months of 1989, given the prevailing interest rates. These institutions coped with weak deposit flows by running off cash and investments and, through the first quarter, stepping up borrowing from the Federal Home Loan Banks. Despite signs of a reduction in mortgage lending activity by these institutions in the second quarter, the overall availability of housing credit did not appear to be significantly impaired.

Spreads between rates on both fixed-rate mortgages and mortgage-backed securities and rates on Treasury instruments of comparable maturity did widen over the first six months of the year, with some market participants reportedly fearing that large-scale liquidations of mortgage-backed securities by troubled thrift institutions could adversely affect the market for those instruments. However, the widening also may have reflected other developments: a general increase in uncertainty about movements in long-term interest rates (and therefore about prospective prepayments), and the flattening of the yield curve, which discouraged issuance of derivative mortgage instruments and thus reduced demand for the underlying mortgage-backed securities.

Total borrowing by nonfinancial businesses in the first half of the year was close to its 1988 pace. Credit demands continued to be buoyed by sizable merger-related financing in the first quarter, and an apparent pickup in capital expenditures increased business borrowing in the second quarter even as credit demands related to mergers and restructurings, while still strong, eased a bit. Because of investor fear of event risk triggered by the RJR–Nabisco acquisition in late 1988 as well as higher long-term rates through much of the period, corporate borrowing was concentrated in short-maturity vehicles. Commercial paper issuance surged during the first half of the year; businesses also relied on bank loans, albeit to a lesser extent. In response to

Range for Debt and Actual Debt and Money Growth



investor concerns about event risk, many firms issued bonds with relatively short maturities of one to five years, or they brought issues to market with straight puts or with so-called poison puts, covenants designed to protect against negative effects on bondholders from future restructurings. Toward the end of the second quarter, with the introduction of these protections and the decline in rates, long-term financing in the corporate bond market was on the upswing.

Net issuance of tax-exempt securities by state and local governments fell sharply over most of the first half of 1989. Investor demand for tax-exempt securities remained strong and, with diminished supply, the ratio of tax-exempt to taxable yields fell to its lowest level since 1984. This ratio rose somewhat late in the second quarter, when the decline in long-term interest rates began to bring forth an increase in refunding activity and a pickup of issuance of bonds to raise new capital.

FEDERAL RESERVE press release

For immediate release July 28, 1989

The Federal Reserve Board today adopted two amendments to Regulation CC, which implements the Expedited Funds Availability Act, regarding the treatment of bank payable through checks.

The amendments are designed to help ease the operational difficulties and lessen the risks imposed on banks as a result of a 1988 court order. The court order ruled that payable through checks must be treated as local or nonlocal based on the location of the bank on which they are written rather than the payable through bank.

The two amendments require:

(1) bank payable through checks to be conspicuously labeled with the name, location, and first four digits of the nine-digit routing number of the bank on which the check is written and the legend "payable through" followed by the name and location of the payable through bank; and

(OVER)

ANNIVERSARY
FEDERAL RESERVE SYSTEM

(2) a bank issuing payable through checks to bear the risk of loss for return of such checks from a nonlocal payable through bank, to the extent that the return from the nonlocal payable through bank took longer than would have been required if the check had been returned expeditiously by the bank on which it is written.

These amendments will be become effective on February 1, 1991, and February 1, 1990, respectively.

The Board's notice is attached.

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Attachment

FEDERAL RESERVE SYSTEM

12 CFR Part 229

[Regulation CC; Docket No. R-0648]

RIN 7100-AB01

Availability of Funds and Collection of Checks

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Final rule.

SUMMARY: The Board is publishing amendments to its Regulation CC, Availability of Funds and Collection of Checks (12 CFR Part 229). The rule changes will alleviate the operational difficulties and additional risks associated with the acceptance for deposit of bank payable through checks.

EFFECTIVE DATE: The effective date for the amendments to § 229.38 of the regulation and commentary is February 1, 1990. The effective date for the amendments to § 229.36 of the regulation and commentary is February 1, 1991.

FOR FURTHER INFORMATION CONTACT: Louise L. Roseman, Assistant Director (202/452-3874), Gayle Thompson, Manager (202/452-3917), or Kathleen M. Connor, Senior Financial Services Analyst (202/452-3917), Division of Federal Reserve Bank Operations; Oliver Ireland, Associate General Counsel (202/452-3625), or Stephanie Martin, Attorney (202/452-3198), Legal Division; for the hearing impaired only: Telecommunications Device for the Deaf, Earnestine Hill or Dorothea Thompson (202/452-3544).

SUPPLEMENTARY INFORMATION:

The Board has adopted two amendments to Regulation CC, which:

(1) Require bank payable through checks to be conspicuously labeled with the name, location, and first four digits of the routing number of the bank on which the check is written and the legend "payable through" followed by the name and location of the payable through bank; and

(2) Place the risk of loss for return of bank payable through checks being returned by a nonlocal payable through bank on the bank on which such checks are written, to the extent that the return from the nonlocal payable through bank took longer than would have been required if the check had been returned expeditiously by the bank on which it is written. The test for expeditious return would be based on the two-day/four-day test in Section 229.30(a)(1) of the regulation.

These amendments will become effective on February 1, 1991, and February 1, 1990, respectively.

BACKGROUND

As adopted in May 1988, Regulation CC provided that checks written on an account at one bank[1/] but payable through another bank were to be considered local or nonlocal under Regulation CC and the Expedited Funds Availability Act ("Act") based on the location of the bank designated as the payable through bank. This treatment of "bank payable through checks" was consistent with the scheme set forth in the Act to permit banks to place longer holds on checks that must be sent to nonlocal banks for collection because such checks generally take longer to collect and return than checks sent to local banks for collection and, therefore, could pose greater risks for depositary banks. In addition, treating the payable through bank as the paying bank would have facilitated the handling of these checks by depositary banks because it would have permitted them to use automated equipment to read the routing number of the payable through bank encoded on a check, which indicates the check processing region in which the payable through bank is located. Availability could have been assigned for the check automatically on the basis of that number.

[1/] Regulation CC defines bank to include all depository institutions, including commercial banks, savings and loan associations, and credit unions. A depositary bank is defined as the first bank to which a check is transferred. A paying bank is the bank by which a check is payable for the purpose of determining whether a check is local or nonlocal for determining availability.

Shortly after the Board adopted Regulation CC defining the payable through bank as the paying bank and thus allowing bank payable through checks to be treated as local or nonlocal according to the location of the payable through bank, the Credit Union National Association ("CUNA") and one of its member credit unions brought suit asserting that this rule was contrary to the provisions of the Act. The suit asserted that such checks, in particular credit union share drafts, should be treated as local or nonlocal on the basis of the location of the bank on which they are written, rather than the location of the payable through bank. CUNA believed that the treatment of bank payable through checks adopted by the Board would have an adverse effect on the acceptability of these checks as a form of payment because most credit union payable through checks would be treated as nonlocal, even though they would generally be deposited in a bank local to the credit union. CUNA argued that if these checks were generally treated as nonlocal, a large number of credit unions that offer payable through share draft accounts would be disadvantaged.

On July 28, 1988, the U.S. District Court for the District of Columbia ruled that under the language of the Act, payable through checks should be treated as local or nonlocal on the basis of the location of the credit union on which they are written rather than the location of the payable through bank. On August 18, 1988, the Board adopted interim amendments to

Regulation CC to implement the court's decision and requested comment on the interim rule pending consideration of a longer term response to the court's interpretation of the Act (53 FR 31290, August 18, 1988). The interim rule applied the court's decision to all bank payable through checks rather than only those written on credit unions.

One hundred fifty-five comments were received on the interim rule. The overwhelming majority of these commenters objected to the treatment of bank payable through checks as local or nonlocal based on the location of the bank on which they are written, asserting that the rule creates operational difficulties and increased risks for depositary banks. Many of the commenters suggested various means of addressing these operational problems and risks.

On November 2, 1988, the Board adopted the interim rule, with minor technical changes, as a final rule, and also published for comment proposed amendments to Regulation CC designed to alleviate the operational difficulties and increased risks resulting from the new rule. (53 FR 44324, 44335, November 2, 1988). These proposed amendments were based on specific suggestions of the commenters on the interim rule and on subsequent discussions with industry representatives and the Industry Return Item Advisory Group, which includes representatives of commercial banks, savings and loan associations, and credit unions. The Board issued the proposals for comment to gain further information concerning whether the proposals were necessary to facilitate compliance with the revised regulation and to improve the check system by speeding the collection and return of payable through checks, and whether they would impose undue burdens on the banks on which bank payable through checks are written.

The four proposals for which the Board requested comment would:

(1) Require bank payable through checks to bear a routing number in the MICR (Magnetic Ink Character Recognition) line local to the bank on which the checks are written, and to be presentable locally;

(2) Require bank payable through checks to be conspicuously labeled with the name, location, and nine-digit routing number of the bank on which the check is written and the legend "payable through" followed by the name and location of the payable through bank;

(3) Authorize direct presentment to the bank on which the payable through check is written; and

(4) Place the risk of loss for return of bank payable through checks being returned by a nonlocal payable through bank on the bank on which such checks are written, to the extent that the return from the nonlocal payable through bank took longer than would have been required if the check had been returned expeditiously by the bank on which it is written.

DISCUSSION

The Board received a total of 763 comments from the public on the proposed amendments to Regulation CC.[2] The following table shows the comments received by category of respondent:

Commercial banks and bank holding companies	264
Savings and loan associations	7
Credit unions	451
Trade associations	23
Corporations	5
Government Agencies	3
Members of Congress	10

Generally, commercial bank commenters supported all four proposals, but particularly stressed the need to require that bank payable through checks bear a routing number local to the bank on which such checks are written. Credit union commenters strongly opposed this proposal, as well as the proposal authorizing direct presentment to the banks on which payable through checks are written. Credit union commenters generally did not oppose implementation of the proposal to require bank payable through checks to be conspicuously labeled with specific information related to both the bank on which the check is written and the payable through bank and the proposal to shift the risk of loss to banks issuing payable through checks for return of such checks from nonlocal payable through banks, to the extent that the return of a payable through check from the nonlocal payable through bank took longer than would have been required if the check had been returned expeditiously by the bank on which the check is written. A summary discussion of the Board's analysis of each proposed amendment follows.

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[2] This number does not include comment letters from Federal Reserve Banks and duplicate comment letters from the same bank.

Require bank payable through checks to be conspicuously labeled with the name, location, and nine-digit routing number of the bank on which the check is written and the legend "payable through" followed by the name and location of the payable through bank. In order for banks to be able to manually identify payable through checks from other check deposits and determine by visual inspection the appropriate hold, rather than rely on the routing number encoded on the check to determine availability, the Board proposed that certain information pertaining to the payable through bank and the bank on which the check is written must be included on the check.

Other than the routing number of the bank on which the payable through checks are written, the information specified in this proposal is currently required by either existing law or Federal Reserve operating circular.[3/] This proposal would

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[3/] See U.C.C. § 3-120, Engine Parts, Inc. v. Citizens Bank of Clovis, 92 N.M. 37, 582 P.2d 809, 23 UCC Rep. Serv. 1248 (1978), and Phelan v. University National Bank, 85 Ill. App. 2d 56, 229 N.E.2d 374, 4 UCC Rep. Serv. 635 (1967). The Federal Reserve Operating Circular on the Collection of Cash Items and Returned Checks, as revised effective July 17, 1989, states that banks should not send to a Reserve Bank for forward collection a check that "does not set forth on its (footnote continued on next page)

clarify that this information is required and would apply to all bank payable through checks, including those checks collected outside the Federal Reserve. It would also require that such labeling be conspicuous, setting a minimum type size standard. In addition, through inclusion in the regulation, liability for noncompliance would be established.

The Board specifically requested comment on the cost savings and operational benefits to depositary banks and the costs to banks using payable through checks that would result from adoption of this proposal. Of the 295 comment letters addressing this issue, 214 commenters supported this proposal and 81 opposed it.

The commenters in support of the conspicuous labeling requirement stated that identification would aid in compliance with the availability requirements of Regulation CC. They noted that the additional information could facilitate manual handling of payable through checks, although it would not permit their identification on an automated basis. The Bank Administration Institute stated, "While this proposal would not appreciably reduce risk, it would aid in compliance with Regulation CC hold

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[3/] (Continued) face the name of the paying bank and a city and state address of the bank that is located in (1) the same Reserve Bank check processing region as, and (2) a Reserve Bank availability zone that provides the same (or slower) availability than the address associated with the routing number in magnetic ink on the item."

rules. According to a recent Bank Administration Institute study, over 80 percent of financial institutions have adopted 'case-by-case' hold policies. Under such a policy, the depositary bank applies holds in selected cases, rather than as a general rule. Under a case-by-case policy, the employee placing the hold must be able to identify local and nonlocal checks accurately by visual inspection. Conspicuous labeling as described in this proposal would aid in this process. Full identification of the payable through bank by name and location would also assist in resolving exceptions in interbank check clearings, such as misrouted items." The Independent Bankers Association of America indicated that community bankers would gain immediate operational benefits from this proposal.

A small number of commenters noted that this proposal would prove helpful when processing damaged checks. Wells Fargo Bank, San Francisco, California, stated, "The alternative of printing identifying information on the face of the check helps when dealing with checks where the MICR line is damaged or destroyed . . . ." For example, the name and location of the payable through bank may be needed in those cases where the routing number on the check cannot be properly read.

The majority of commenters that supported the conspicuous labeling proposal indicated that they preferred adoption of the proposal to require payable through checks to bear a routing number in the MICR line local to the bank on which

the checks are written. Marine Midland Bank, New York, New York, commented, "This alternative is better than no change in the form in which payable through drafts are issued, but it does nothing to reduce the unreasonably high operational costs of identifying bank payable through checks."

Some credit union commenters stated that this proposal was not objectionable provided they would be given a reasonable period of time to handle the reprinting of their share drafts. The Credit Union National Association generally supported a revised version of this proposal. CUNA commented that "only the first four digits of the credit union's routing number should be required. The additional digits will not facilitate identification of items as local or nonlocal; in fact, they will only further clutter the drawee area and complicate identification by consumers and bank tellers. Inclusion of all nine digits will also promote direct presentment of payable through share drafts to credit unions . . . ." The Independent Bankers Association of America supported this proposal, but noted, "Most community bankers indicated that including another nine digit routing number on the face of the check could result in unnecessary confusion for the teller making the identification."

The Board had noted, in its request for comment on this proposal, that an ancillary benefit to requiring that the nine-digit routing number of the bank on which the check is written be printed on the face of the check is that it would provide information needed to establish arrangements for automated clearinghouse (ACH) transfers to or from an account--information that is generally obtained from a check of the customer requesting the ACH service. The Board believed that the identification on the face of the check of the routing number of the bank on which the check is written would facilitate sending ACH transfers to the account-holding bank rather than to the payable through bank, which generally rejects the transfer. A major payable through bank, however, indicated to Board staff that it handles ACH transfers for a number of credit unions for which it also performs payable through processing and that inclusion of the nine-digit routing number of the credit union could cause ACH transfers to be misdirected to the credit union.

Inclusion of only the first four digits of the routing number of the bank on which the payable through check is written would be sufficient to permit depositary bank personnel to assign local or nonlocal availability to these checks because these digits identify the check processing region in which the bank on which the check is written is located. This would eliminate the need to refer to a list of cities and towns in the depositary bank's check processing region to determine if the location of the bank on which the check is written is local for purposes of Regulation CC. The Board believes that requiring the identification of the entire nine-digit routing number, rather

than only the first four digits, on the face of bank payable through checks would not provide any incremental significant benefits, and has modified the proposal to require inclusion of only the first four digits of the routing number of the bank on which the check is written on the face of the check.

CUNA also stated, "Because of the advantage to consumers, CUNA urges a requirement that the drawee area of all checks contain the first four digits of the drawee's routing number." The Board does not believe it is necessary that the requirement apply to all checks because tellers and consumers can determine local or nonlocal availability by referring to the first four digits of the routing number in the MICR line for all checks other than bank payable through checks.

A few commenters suggested that the Board should specify where the required information is to be placed on the face of the check. The Board has provided in the commentary to § 229.36 that the required information is deemed conspicuous if it is located in the title plate[4] on the check.

The Board proposed that the rule become effective one year after adoption. A small number of commenters discussed the appropriate effective date for this proposal. Bank commenters either supported the proposed one year implementation period or requested an effective date of less than one year. Credit union commenters generally stated that they would need additional time for their members to use existing check stock and reorder the new checks. The Credit Union National Association stated, "A more reasonable effective date of this proposal would be two years after adoption of the amendment to allow credit union members to use their current supply of share drafts." While on average customers reorder checks annually, additional time would allow for the check printers to make title plates and for credit union members to reorder checks. The Board believes that eighteen months will provide sufficient time for both the manufacture of new plates and check reorders.

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[4] The title plate appears in the lower left quadrant on the face of the check, below the amount line and above the memo line, and generally includes the name and location of the paying bank.

The 81 commenters that opposed the conspicuous labeling proposal stated that it encourages manual handling. A number of commenters indicated that they opposed this proposal because they believed that the proposal requiring a local routing number in the MICR line is a better solution. First Virginia Banks, Inc., Falls Church, Virginia, stated, "First Virginia does not favor this proposal as it places the burden of recognizing payable through checks on the teller. This proposal invites human error and Regulation CC violations and will only act to delay item processing, because these checks will have to be handled as exception items."

Maryland National Bank, Baltimore, Maryland, stated that this proposal "does not permit the automated processing of payable through draft checks which is critical to maintaining the integrity of the payment system. This would create an indeterminate degradation of customer service at the branch level of financial institutions and a corresponding increase in expenses due to the visual inspection required which would be eventually passed on to the customer."

A small number of commenters discussed the costs of this proposal. These commenters indicated that without the concurrent adoption of the proposal requiring a local routing number in the MICR line, the costs to banks would be prohibitive because they would have to manually process the payable through checks. Bank One, Milwaukee, Wisconsin, stated, ". . . sight review would significantly increase a bank's processing costs because it would require adding employees to the teller proof or transit operation." Bank One estimated $225,000 per year as "the labor expense we would incur if we have to visually inspect all items deposited, and manually make float adjustments for share draft or payable through items."

A number of commenters expressed concern that the labeling requirement could have an adverse impact on the acceptance of payable through drafts. The Chicago Clearinghouse Association, Chicago, Illinois, commented, "This requirement would make obvious visual distinction between a regular check and a payable through check and would be detrimental to institutions using payable through checks. The distinction may create negotiability problems with merchants and consumers who may not understand the reasons for such obvious labels. Because of the label, some merchants may not honor payable through checks as cash items." The specified information is already required, however, except for the first four digits of the routing number, which is necessary for the depositary bank to determine availability. Consequently, the Board does not believe the labeling requirement will cause negotiability problems for payable through checks.

The requirement that specified information be printed on the face of the check does not address the potential risks of bank payable through checks becoming attractive vehicles for fraud because it does not accelerate the collection of payable through checks. Under this proposal, the bank on which the payable through checks are written or its customers would incur costs to reissue its checks. Given an eighteen month lead time, the cost of reissuance should be minimal. This proposal would not require any bank to move its payable through check processing to a different bank.

The Board is adopting an amendment to Regulation CC that would require bank payable through checks to be conspicuously labeled with the name, location, and first four digits of the routing number of the bank on which which the check

is written and the legend "payable through" followed by the name and location of the payable through bank. This rule becomes effective eighteen months after final adoption.

Place the risk of loss for return of bank payable through checks being returned by a nonlocal payable through bank on the bank on which such checks are written, to the extent that the return from the nonlocal payable through bank took longer than would have been required if the check had been returned expeditiously by the bank on which it is written. Commenters on the interim rule expressed concern regarding the potential risk of losses and increased exposure to fraud for depositary banks resulting from the revised rule. They indicated that checks considered local for determining availability should also be considered local for determining whether the checks are returned expeditiously so that the risks to depositary banks would not be increased by the revised rule. Two hundred eighty comment letters addressed this proposal. Two hundred twelve commenters supported this proposal and 68 commenters opposed the proposal.

The commenters in support of this proposal stated that it would assign risk in the payment system to the appropriate cause of that risk. The Alamo Savings & Loan Association, San Antonio, Texas, stated, "Even if none of the other proposed amendments are approved, this one must be, because it is inappropriate to allow issuers of 'payable through' checks to accrue the benefits of the definition of local checks from an availability standpoint, but not be responsible for liabilities inherent in the delayed return of unpaid checks from nonlocal 'payable through' banks." The Citizens and Southern Georgia Corporation, Atlanta, Georgia, commented, "It is reasonable and fair to place the risk of loss on the institution responsible for delaying the return process beyond the time normally required for local checks."

In an effort to determine the risks confronting a large regional bank due to the adoption of the rule establishing the bank on which a payable through check is written as the paying bank for determining funds availability, Sovran Financial Corporation, Norfolk, Virginia, conducted an extensive survey of payable through checks in June and July, 1988. Sovran explained, "From the survey, we determined that Sovran--in the states of Maryland, the District of Columbia, and Virginia would process nearly $1 billion a year of payable through items drawn on one of the two major national processors of such items. We projected the annual volume of these items to be 10.2 million. Visual inspection of these items disclosed that almost one half are issued by geographically local institutions. However, because the payable through bank--or the processing bank--has the opportunity to return the items to us in the Board's prescribed nonlocal time frame, the question of whether the issuing bank is geographically local is irrelevant. We applied the actual rate of dishonor for these items, which we had tracked over a two year

period, to the dollar and volume data gathered. We determined that at a minimum, based on a one day delay (we make the funds available to the customer in three days, but we receive the return on the fourth day) our annual exposure from these items would be $9 million."

The majority of the bank commenters that supported the proposal shifting the risk of loss to the bank on which the payable through check is written recommended that this proposal should be adopted immediately as an interim measure until the proposal requiring a local routing number in the MICR line could be implemented. The Citywide Bank of Denver, Denver, Colorado, stated, "Until such time as [the proposal requiring a local routing number in the MICR line] can be fully implemented, our bank strongly recommends your [proposal shifting the risk of loss to the bank on which the payable through check is written]. . . be instituted for the protection of all depositary banks. There does not seem to be a time factor requirement to implement this approach and the cost factor on the norm, would be minimal."

Some bank commenters that supported this proposal expressed concern about the practice of claiming a loss under this proposal. The Chicago Clearinghouse Association commented, "We are in favor of assigning risk in the payment system to the appropriate cause of that risk, but are concerned about the practicality of claiming a loss under the current proposal. With so many schedules for availability and collection, proving responsibility for loss will be difficult. This makes it unlikely that any but large-dollar losses will be contested. We suggest that a method be developed within the normal return system for a depositary bank to claim a loss and receive compensation." Prime Bank, Grand Rapids, Michigan, stated, "The Federal Reserve should take measures to accommodate these banks who have suffered such liability and losses to easily recoup these losses from the payable bank."

Some credit unions expressed limited support for the proposal shifting the risk of loss to the bank on which a payable through check is written. The Family Community Credit Union, Charles City, Iowa, commented that this proposal "is also a proposal that could be workable for credit unions. Either one of these proposals [the conspicuous labeling proposal or the proposal shifting the risk of loss to the bank on which the payable through check is written] would not require the expense, equipment and staff that the other two would require."

The Chase Manhattan Corporation, New York, New York, a major payable through processor, stated, "Of the four approaches the Board has proposed, Chase prefers this approach because it would provide an effective means of protecting depositary banks from the risk of loss for return of bank payable through checks without dismantling the present efficient and cost effective payable through system."

Some commenters suggested that the proposal be modified to limit the risk that could be allocated to the bank on which the check is written. The Credit Union National Association generally supported a modified version of the proposal. CUNA commented, "Credit unions should only assume actual direct losses caused by a delayed return from a payable through bank; that is, only losses of amounts that exceed the $100 next-day availability rule and are under the $2,500 amount covered by the large-dollar item notice requirements of the Regulation."

Under the proposed rule to shift the risk of loss, the bank on which the check is written would only be responsible for losses that occurred between the time that the check would have been required to be returned if returned expeditiously by that bank and the actual time that it takes to return the check from the payable through bank. If the payable through bank complies with the current notice of nonpayment requirement for returned checks of $2,500 or more and the depositary bank takes action to minimize its risk upon receipt of the notice, no loss should occur that could be allocated to the bank on which the check is written. If the depositary bank takes no action upon receipt of the notice, it may be liable for losses incurred under the liability provisions of § 229.38(a). Thus, the Board does not believe it is necessary to modify the rule to address CUNA's suggestion that liability should only apply to those checks that are less than $2,500 and thus not covered by the notice of nonpayment requirements.

CUNA also suggested that the allocation of liability be limited to only those amounts that exceed the $100 next-day availability rule. The Act and Regulation CC require depositary banks to provide next-day availability for the first $100 of the aggregate amount of a customer's check deposits made during a banking day. The proposed rule would only shift the risk of loss to the bank on which the check is written in cases where the loss would not have occurred if the check had been returned under the local time frame. If losses occurred because the depositary bank made funds available for withdrawal before it could learn of a local return, such losses would not be shifted to the bank on which the payable through check is written. In addition, because a customer's check deposit may include a mixture of payable through checks and other checks, the Board does not believe it would be appropriate to release the bank on which the payable through check is written from liability for the first $100 of a day's deposit.

The Board had specifically requested comment on what standard(s) should be applied to determine whether the return from a nonlocal payable through bank took longer than would have been required if the check had been returned expeditiously by the bank on which the check is written. Regulation CC requires banks to return checks expeditiously. It allows banks to utilize two tests to determine whether a check has been returned expeditiously. Under the two-day/four-day test, a check is

returned expeditiously if a local check is received by the depositary bank on or before the second business day after the banking day on which the check was presented to the paying bank or if a nonlocal check is received by the depositary bank on or before the fourth business day after the banking day on which the check was presented to the paying bank. Under the forward collection test, a check is returned expeditiously if a paying bank sends the returned check in a manner that would ordinarily be used by a bank in the paying bank's community to collect a check drawn on the depositary bank. Generally, this test would be satisfied if a transportation method or collection path is used for returns that is comparable to that used for forward collection.

Several bank commenters indicated concern over the practicality of claiming a loss under the proposal, indicating that it would be particularly difficult to prove responsibility for loss under the forward collection test. Several credit union commenters, including CUNA, suggested that both tests be applicable. The Board believes that the two-day/four-day test provides a measurable standard to ascertain whether the return of the payable through check is expeditious. In contrast, the determination of whether return of a check is expeditious under the forward collection test is made based on the manner by which the paying bank returned the check, rather than the time within which the depositary bank received the return. Since a payable through bank nonlocal to the bank on which the check is written would not use the same manner of return as that used by the bank on which the check is written to collect checks, the forward collection test could not be used as a standard for expeditious return by the payable through bank.

Bank commenters opposed to the proposal shifting the risk of loss to the bank on which the payable through check is written stated that this proposal does not address the operational problem of identifying payable through checks. Eastover Bank for Savings, Jackson, Mississippi, stated, "Shifting the risk of loss is not enough. This will simply lead to many operational difficulties in identifying these checks and will not aid in reaching the goal of a more speedy check collection and return processing system." First Virginia Banks commented, "First Virginia does not favor this proposal, as it will only serve to increase Late Return Claims, litigation expenses, and does not allow for expedited processing of these items."

A number of credit union commenters that opposed the proposal expressed concern about its implementation. The Southern Nevada State Savings & Credit Union, Las Vegas, Nevada, described this proposal as complicated and unmanageable. It commented, ". . . strict time limits would have to be imposed on the receiving banks as well as a detailed record keeping, timed, system that would record the flow of the items. Otherwise,

anytime there was A DISPUTE for a loss, we've never had one in 20 years, the receiving institution could simply claim a delayed processing schedule. A tracking mechanism would be required."

A small number of credit union commenters stated that they did not think this proposal was necessary. The Navy Federal Credit Union, Merrifield, Virginia, commented, "We are not aware of any evidence of actual losses which would justify the presumed need. Without further justifications, no change to the liability assignments is recommended." A few credit union commenters indicated that the payable through bank should be responsible for the loss instead of the credit union.

The Board is adopting the proposal shifting risk of loss to the bank on which the payable through check is written. The test for expeditious return under this final rule will be based on the two-day/four-day test under § 229.30(a)(1) of the regulation.

The Board also requested comment on the appropriate lead time for implementation of the proposal. Although CUNA indicated that a one-year lead time would allow credit unions that issue payable through drafts sufficient time to modify their insurance coverage to cover any increased risk of loss, CUNA commented that the risk of loss associated with bank payable through checks is virtually nonexistent. On the other hand, many bank commenters indicated that this proposal should be implemented immediately. The Board believes that insurance coverage can be obtained in less than one year. In any event, variations in the effective date of this proposal should have minimal effect on the banks on which payable through checks are written. Therefore, this proposal will become effective six months after adoption.

Require bank payable through checks to be presentable locally and bear a local routing number in the MICR line. Commenters on the interim rule expressed concern about the operational problems posed by the court ruling and interim amendments. They indicated that the Board should require credit unions to encode their own routing numbers on their checks or that of a local payable through bank.

The Board specifically requested comment on the cost savings to depositary banks and the costs to banks issuing payable through checks so that the benefits and costs of this proposal could be more fully assessed. Seven hundred twenty-two comment letters addressed this proposal. Two hundred eighty-two commenters supported this proposal and 440 commenters opposed this proposal.

The commenters in support of the proposal to require a local routing number in the MICR line, predominantly banks, described it as the only practical solution to their operational problems and risk concerns. Several supporters also noted that the proposal would reduce confusion for the consumer. The American Bankers Association stated, "Currently, there is no practical or comprehensible way to describe to a consumer how to

distinguish between local and nonlocal checks and payable through checks except to advise them generally to inquire when they deposit a payable through check. The proposal will allow consumers simply to refer to the MICR line to ascertain whether a deposit is subject to a local or nonlocal check hold."

Several commenters in support of this proposal discursed how it relates to the intent of Regulation CC. The Independent Bankers Association of America commented, "We believe that requiring a local payable through bank is most consistent with the Act's linkage between the availability of funds and the time it takes to collect and return a check." Great Western Financial Corporation, Beverly Hills, California, stated, "By requiring bank payable through checks to be presentable locally and bear a local routing number in the MICR line, Great Western believes that the problems associated with the acceptance for deposit of payable through checks will be addressed, the intent of Regulation CC will be upheld and the best interests of the consumer will be served."

Continental Bank, Chicago, Illinois, stated, "Any proposal that does not allow banks to rely on the MICR line will slow the automated check clearing process considerably and thus retard the goals set by EFAA. As the Board observes, payable through checks account for less than 3% of the processed check volume . . . . Any proposal that does not allow a bank to rely on the MICR line will slow down the processing of the 97%

remainder of the checks which today are being efficiently processed. [This proposal] not only confirms the axiom, 'if it ain't broke, don't fix it,' it also encourages credit unions to process their items in a manner that will enhance the goals of EFAA. . . . [This proposal] thus places the cost of expeditiously processing payable through checks on the segment of the industry that enjoys the benefit, and in addition, encourages high speed automatic processing of checks consistent with the goals of EFAA."

Commenters explained that the primary benefit of this proposal would be to eliminate problems in determining proper availability by allowing banks to rely on the routing number encoded in the MICR line. The Bank Administration Institute stated that this proposal is "the most comprehensive solution to the problem. It reduces risk by providing a local clearing and return mechanism for checks that must be treated as local for check holds. It also simplifies compliance because depository institutions would be able to rely on the routing number to identify the local check processing region, either by visual inspection or automated means." First Virginia Banks stated, "First Virginia favors this proposal as it allows for automated processing and expedites the check collection. It will eliminate as much human intervention as possible and allows payable through checks to be handled in mainstream processing and not as exception items."

Without the ability to rely on the routing number to determine whether a check is local or nonlocal and thus determine the appropriate holds, a bank must develop alternative procedures to identify payable through checks and place the appropriate holds on such checks. These procedures include (1) having the teller identify and outsort payable through checks as they are deposited so that holds can be manually applied; and (2) identifying the routing numbers of nonlocal payable through banks[5/] and assigning local availability on an automated basis to all checks destined to these routing numbers.

Bank commenters noted that requiring a local routing number in the MICR line was the only proposal that placed the time and expense of processing payable through checks on the bank on which the checks are written. Branch County Bank, Coldwater, Michigan, commented, "The requirement to make bank payable through checks bear a local routing number is the only one which places the time and expense of processing where it rightly belongs."

Bank commenters stated that it was difficult to estimate the operational cost savings that would result if this proposal were adopted. AmSouth Bank, Birmingham, Alabama, estimated that its annual dollar cost in teller staffing to

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[5/] A survey by Board staff identified 65 routing numbers that are used on bank payable through checks.

implement a manual inspection approach to payable through checks would be $6,607,500. Bank One stated, "There is a cost avoidance [through requiring a local routing number in the MICR line] of about $225,000 per year. This is the labor expense we would incur if we have to visually inspect all items deposited, and manually make float adjustments for share draft or payable through items." Citicorp, New York, New York, stated, "As for the costs associated with the proposal, it is practically impossible to provide meaningfully accurate figures; it is not unreasonable, however, to project some figures based on the check collection process itself. For the banking industry nationwide (not including credit unions and the processors), Citicorp estimates that it would take a teller approximately two/three seconds to determine whether or not an item is a payable through draft and whether or not it is local based on an examination of the check itself. . . . Factoring in the number of tellers employed, their hours, salary, other benefits and the approximate total number of items processed by all banks in the course of a year, we would project a cost figure of five hundred million dollars . . . for the banking community to comply with the regulation as amended as a result of the CUNA suit - absent adoption of the proposed amendments."

This estimate, however, assumes that all banks apply differential holds to deposits of local and nonlocal checks, as permitted in the regulation. According to a study conducted by

the Bank Administration Institute, 83 percent of all banks provide immediate or next-day availability with the option to apply holds on a case-by-case or exception basis. The BAI study is corroborated by surveys conducted by trade associations in coordination with the Federal Reserve, which indicated that 75 percent of banks provide immediate or next-day availability with the option to apply holds on a case-by-case or exception basis. Applying case-by-case holds generally entails manual intervention to determine those checks on which holds should be imposed. Thus, the need for a method to apply automated holds appears to be limited to a minority (approximately 20 percent) of banks. Even though only a small number of banks place differential holds, these banks are often large and represent a greater proportion of all checks deposited.

By imposing differential holds for local and nonlocal checks, these banks have indicated a high level of concern about the risk of making funds available for withdrawal before learning whether a check has been returned. The Board recognizes that by not adopting the proposal requiring local routing numbers for payable through checks, a depositary bank electing to grant local availability for all checks drawn on the routing numbers of nonlocal payable through banks would increase this risk by granting local availability for checks that would not be subject to the local schedules under the regulation. In addition, banks applying differential holds are subject to litigation risk and could be liable for exceeding the maximum availability schedules if they do not grant local availability for a payable through check bearing a nonlocal routing number. Inaccurate assignment of availability could result when a teller makes errors in outsorting payable through checks or when the bank fails to accurately identify all nonlocal banks acting as payable through banks for local banks. The Board believes that a depositary bank can control these risks through its diligent application of the process it chooses to use in applying holds to assure that it grants local availability for payable through checks issued by local banks.

Commenters in support of the proposal requiring local routing numbers also indicated that they would receive faster availability and incur lower collection costs for payable through checks drawn on local banks under this proposal than they can receive when sending the checks to the nonlocal payable through bank for collection. Suntrust Service Corporation, Orlando, Florida, stated, "Current volume from Suntrust Service Corporation Florida Operations to just the New York and Minneapolis share draft processors is approximately 6,500,000 items per year at a cost over $20,000.00 per year for transportation expenses."

Some bank commenters noted that this proposal would limit delayed disbursement. These commenters indicated that the credit unions using nonlocal payable through banks have an unfair

float advantage over other banks. The Litchville State Bank, Litchville, North Dakota, commented, "For the credit unions to have special treatment is to give the banks and savings and loans unfair treatment. Please make the laws the same for all." The president of the Citizens Bank of Oviedo, Oviedo, Florida, commented, ". . . I think it should be illegal for any financial institution to carry its clearing account on the other side of the country so they can take advantage of float."

Payable through banks have indicated that many collecting banks receive availability for payable through checks drawn on a nonlocal payable through bank equivalent to that for checks collected locally by sending the checks directly to the nonlocal payable through bank. The payable through banks indicated that these "direct send" arrangements can only be cost effective for the collecting banks when sufficient volumes are being delivered to one presentment point and that maintenance of the payable through system is necessary to achieve these critical volume levels.

The majority of the banks commented that the potential risk of loss and increased exposure to fraud is also difficult to quantify. Bank of America stated, "The greatest potential savings, however, would not be operational. It would result from the reduced exposure to fraud losses . . . . While we have not attempted to estimate the fraud potential, as the processor of an estimated $850 million per year in payable through share drafts, our exposure is evident." Florida National Bank, Jacksonville, Florida, commented, ". . . this proposal would eliminate the likelihood that these checks would become vehicles for check fraud. It would reduce the collection time, reduce overall float, as well as reduce the risk for depository banks."

The 440 commenters that opposed the proposal, predominantly credit unions, indicated that requiring payable through checks to bear a local routing number in the MICR line was totally unacceptable and that its burden and high costs would far outweigh any benefits. Several commenters questioned the justification for the proposal. United States Senators Rudy Boschwitz and David Durenberger commented, ". . . the Federal Reserve has yet to demonstrate that a drastic step such as local MICR number is necessary in order to address perceived problems with the payable-through system. There are other solutions that should be explored before destroying a system that works well for credit unions." The Arizona Credit Union League, Inc., Phoenix, Arizona, stated, ". . . there is no evidence that the proposed changes are warranted. Indeed there are no cases of fraud or embezzlement on record that suggest problems with the payable through system to the degree suggested by the proposed regulations." CUNA commented that this proposal would "reduce efficiencies of the check collection system by creating thousands of additional endpoints."

Commenters expressed concern that this proposal could lead to the dismantlement of all national and regional payable through systems and thereby result in the loss of the efficiencies gained through economies of scale achieved from these systems. They explained that the payable through share draft program was initiated as a means for credit unions to provide a checking system to their members at a reasonable cost. Many credit unions stated that they are able to provide checking services only through the use of payable through processors, which provide efficient processing at a cost much lower than in-house processing. The Sherwin-Williams Employees Credit Union, Chicago, Illinois, stated, "Credit unions on a national or regional payable through program should not be forced to abandon their cost efficient, truncated system. This system has worked well for almost 15 years and has allowed thousands of credit unions to offer share drafts to millions of their members." The Alpena Alcona Area Credit Union, Alpena, Michigan, commented, ". . . the dismantlement of the payable through system would deprive members of a viable service, and at the same time increase the operational costs of the credit union --- all without significant advantage." The Motorola Employees Credit Union, Schaumberg, Illinois, stressed that it chose Travelers Express as its payable through processor because the payable through program is both efficient and economical. It noted that it would be too costly to convert to in-house or local processing or to arrange for local intercept points.

Commenters expressed concern that local processors would not be able to provide the truncation services currently provided by the major payable through processors. They described the current truncation system as very cost efficient. H&E Telephone Federal Credit Union, Rochelle Park, New Jersey, noted that it previously used local banks to clear its checks but switched to a national processor that was superior. Problems with its local bank included: "1) the return of actual checks to us which resulted in a mountain of paper and work to organize data; 2) poor reporting capabilities and longer time lags for information availability; and 3) more costly service charges."

Credit union commenters cited two costs of implementing the proposal requiring local routing numbers on payable through checks. First, credit unions and other banks issuing payable through checks would be required to either convert to in-house processing or establish a local presentment point for their payable through checks. They commented that these alternatives would be so costly that the continued share draft service would not be cost effective and would result in their imposing excessive fees on their members. Many commenters stated that an in-house system would not be economically feasible because of their small size and volume. The IBEW Federal Credit Union, Knoxville, Tennessee, commented that conforming "to the proposed amendments would be cost prohibitive due to increased processing costs, risk involved, and additional staff and data processing needs."

The City of Huntington Federal Credit Union, Huntington, West Virginia, indicated that a local bank estimated that it would charge approximately $30,000 per year to process the credit union's share drafts, compared to an annual charge of approximately $10,300 assessed by Chase Manhattan Bank to perform similar services. Another credit union estimated that current share draft account fees charged to credit union members would triple if the credit union closed and they were forced to use local banks. A third credit union with 850 share draft accounts indicated that its per account cost would increase an estimated $41.41 annually as a result of this proposal. A credit union that uses the Travelers Express payable through draft processing service stated that its average per item cost is $.06 and the time required to receive and post accounts is less than one hour per day. This credit union estimated that this proposed amendment would require the purchase of additional equipment costing approximately $20,000 and the addition of one staff person at approximately $15,000 per year.

Commenters also noted that a second type of cost associated with the proposal is the cost of reissuing checks to customers. In addition to the cost of reissuing check stock, a change in routing number requires the additional cost of dual processing during the transition period when the processor must process checks with both the old and new routing numbers. The cost associated with dual processing will vary based on the time required to replace check stock. The Board believes that banks can minimize this time through diligent instruction to its customers in reordering and using new checks. These costs would either be borne directly by the customer, who would have to pay for new check stock, or indirectly by the customer through increased service charges imposed by the bank that bore the cost of replacing the check stock.

In addition to the cost/benefit analysis, the Board considered the competitive implications of this proposal. This analysis included competitive factors vis-a-vis credit unions vs. commercial banks. Credit union commenters indicated that because this proposal has the effect of limiting a credit union's choice of payable through bank, its adoption could prompt local banks to raise their fees. In addition, many credit unions believe that local banks may not have the incentive to keep costs down for the credit union issuing payable through checks because many of these local banks are competing for the same customer accounts as those held by the credit union. The Redford Township Community Credit Union, Redford, Michigan, stated, "This proposal would eliminate most of the competition which is a healthy situation for cost control."

Some credit unions indicated that they had no local processing options. The Fort Harrison VAF Federal Credit Union, Fort Harrison, Montana, stated, ". . . there is no Montana-based processing point at this time and one could not be set up within the one year deadline." The Jackson USDA Federal Credit Union, Jackson, Mississippi, commented that "there are no banks in the state of Mississippi that we know of that will process share drafts for credit unions." The manager of the Jackson USDA FCU contacted two local banks about processing share drafts and was informed that their market studies indicated there would be insufficient credit union share draft volume to make the share draft processing profitable.

Other comments indicated that the competitive issues between commercial banks and credit unions are broader than the issues raised by these payable through check proposals. Bank commenters indicated that the credit unions' tax-free status and liberal common bond restrictions give the credit unions an unfair advantage in competing for customers, which is only exacerbated by the credit unions' ability to issue payable through checks.

Commenters also noted that this proposal would have an anti-competitive effect on consumers by limiting choice of bank. The majority of small credit unions that commented on this proposal indicated that they would have to discontinue their share draft programs if the proposal were adopted because they would be unable to finance the increased human and equipment resource requirements. They expressed concern that they would no longer be able to offer a low cost checking alternative to lower income customers. The Pennsylvania Mennonite Federal Credit Union, Scottdale, Pennsylvania, stated, "In this day when the

U.S. Congress is considering 'lifeline banking' and providing basic financial services that ordinary people can afford, we find it incongruous for a major organization such as the Federal Reserve System to mandate regulations which will either increase the cost of these services to our members or result in their discontinuance altogether."

The Newark Aerospace Federal Credit Union, Heath, Ohio, commented, "A lifeline no service charge share draft account might no longer be available to many of our members because of increased cost. If we could not afford the necessary equipment, 2,200 members would lose their share draft accounts and be forced to open checking accounts at banks. Recent reports indicate the average checking account costs the consumer close to $200 annually." Congressmen Frank Annunzio and Bruce Vento stated, "We believe the Board has consistently failed to balance the adverse effects such a proposed amendment will have on the medium to small credit unions and their life-line services, such as share drafts. Instead the Board cited unsubstantiated allegations of fraud and operation difficulties as its basis for requiring such a proposed amendment to Regulation CC."

Credit unions and payable through processors noted that this proposal would have an anti-competitive impact by limiting processing choice. The Dearborn Federal Credit Union, Dearborn, Michigan, stated, "Dearborn Federal believes that every credit union should have the right to choose the most efficient

and cost effective system available." The Chase Manhattan Corporation stated, "If this approach were implemented, the Federal Reserve System with its extensive processing facilities and resources in every check processing region would have a competitive advantage over private sector providers in offering a national truncation service."

The Board believes that provision of truncation services by the Federal Reserve Banks and other private sector providers should help facilitate the payable through system by expediting the delivery of check information to the payable through bank, thereby allowing the payable through bank to provide more efficient, cost-effective payment services to credit unions. The Federal Reserve encourages private sector participation in providing truncation services, and the Reserve Banks developed their truncation service in coordination with private sector truncation service providers through the National Association for Check Safekeeping, which has expressed an interest in supporting the payable through system by means of truncation.

A few commenters noted that this proposal could be difficult to enforce because some credit union members order their own drafts from printing companies and they would be individually responsible for ensuring that their drafts have the proper routing number in the MICR line. A small number of commenters identified as another potential problem that some members would be reluctant to throw away unused drafts even if new drafts were issued free of charge.

The National Association for Check Safekeeping (NACS) proposed an alternative to this proposal. NACS proposed use of the 8000 series of routing numbers to identify checks that are payable through a bank not located in the same check processing region as the issuer of the check. NACS noted that the only current use of the 8000 series is for travellers checks.

Under the NACS proposal, the first digit of the routing number would be the number 8, identifying the 8000 series. The second and third digits would identify the check processing region of the bank on which the check is drawn. These two digits could be the number 01 through 48, identifying one of the 48 Federal Reserve check processing regions. The fourth and fifth digits would identify the check processing region of the payable through bank. Again, the two digits could be 01 through 48 identifying a check processing region. The sixth, seventh, and eighth digits would identify the particular payable through bank(s) within each check processing region. The ninth digit would be the check digit.

NACS stated, "Depositary banks could easily examine the 8000 series number and determine two things. Banks can determine where to send the check for collection and the funds availability to assign. Only banks using payable through processors in another check processing region will be eligible for an 8000 series

routing number." Use of the 8000 series of routing numbers would enable banks to use automated equipment to read the MICR line to assign funds availability. Several commenters urged the Board to first research the NACS proposal further if the Board planned to adopt the proposal to require that payable through checks bear a local routing number in the MICR line. If the NACS proposal was determined to be an effective alternative, the commenters urged the Board to issue the proposal for public comment to determine whether it could provide the same benefits to depositary banks as the local routing number proposal without disrupting the national payable through system.

Board staff discussed the NACS proposal with industry representatives, equipment vendors, and check processing staff at the Federal Reserve Banks. Equipment vendors indicated that use of the 8000 series would require equipment upgrades at collecting banks, and that purchase and installment could take up to two years. Federal Reserve Bank staff indicated that this proposal could impact sort patterns, memory capacity for look-up tables, and processing schedules.

Adoption of the NACS proposal would also require reissuance of all payable through checks. Because the Board is adopting the conspicuous labeling requirement at this time, later adoption of the NACS proposal would require banks issuing payable through checks to reissue their checks twice. Two reissuances would be costly and burdensome for these banks and their customers.

Adoption of the NACS proposal would only benefit the approximately 20 percent of banks with blanket hold policies. The proposal would not provide incremental benefits to the large majority of banks that generally offer same-day or next-day availability. The NACS proposal would, however, impact all collecting banks because they would have to upgrade equipment to process these checks. Since this proposal would only benefit the minority of banks with blanket hold policies and would be burdensome for credit unions and collecting banks, the Board believes there is not sufficient justification to issue the NACS proposal for public comment.

Sovran Financial Corporation also suggested an alternative to the proposal requiring payable through checks to bear a local routing number in the MICR line. Sovran recommended that the "Board consider setting a specific time limit--two years--by which all issuers of payable through items wishing to obtain better acceptability for their items in the local marketplace must convert to using a local paying agent for the items, and to ensure that the items bear the routing number of the local paying agent. Those institutions which believe the costs of increased acceptability outweigh the benefits will still have the opportunity to use a distantly located payable through bank, but collecting banks will also have the opportunity to grant nonlocal funds access to depositing customers for these items." The Act does not give the Board the authority to

lengthen the availability schedules, which would be the result of this proposed alternative.

Travelers Express Company, Minneapolis, Minnesota, recommended two alternatives to the proposal requiring a local routing number in the MICR line. Travelers suggested using position 44 in the MICR line to identify whether payable through checks are local or nonlocal. The Board believes that, while it would be possible to use position 44 to identify whether or not a check is a payable through check, manual intervention would still be necessary to determine whether such check is local or nonlocal. Thus, this alternative would provide only marginal benefit to depositary banks and should not be pursued at this time.

A second suggestion by Travelers Express was to implement "a requirement that payable through banks notify their local Federal Reserve of every routing number that includes items that would be considered local. The Fed could then publish a directory of these numbers. This would permit automation for the vast majority of the items at issue." As previously indicated, Board staff developed a list of 65 routing numbers that are used on bank payable through checks. The Board believes that, because banks may begin to offer or discontinue payable through services at any time, maintaining the accuracy of such a list and disseminating updated information to all depositary banks would be difficult.

Some commenters discussed the appropriate lead time for implementation of the proposed requirement that bank payable through checks bear a local routing number in the MICR line. The majority of the commenters noted that the proposed one year implementation time period was too short. Oak Ridge Government Federal Credit Union, Oak Ridge, Tennessee, commented, "My only suggestion would be that the implementation date be extended from 12 to 24 months. Any credit union that has gone through the conversion process already will tell you that it is impossible to accomplish in 12 months, and that is after the decision is made. The decision whether to go with a local third party processor or in-house can take 3 to 6 months."

The Board did not find reason to believe that the benefits of implementing the proposal to require payable through checks to bear a local routing number in the MICR line outweigh the reported costs of implementation, and thus is not adopting this proposal.

Authorize direct presentment to the bank on which payable through checks are written. Currently, the law is unclear as to whether a bank payable through check can be presented directly to the bank on which it is written or whether such checks must be presented to the payable through bank. Expressly permitting such checks to be presented directly to the bank on which they are written would enable banks to have such checks collected and returned locally, and thus would avoid

delays in collection and return that might occur when the depositary bank sends the checks to nonlocal payable through banks.

The Board specifically requested comment on the cost and operational burden of this proposal on banks that use payable through checks, the potential cost savings to depositary banks, and the appropriate lead time for implementation of this proposal if adopted. Six hundred thirty-seven comment letters addressed this proposal. One hundred seventy-two commenters supported the proposal and 465 commenters opposed it.

The commenters in support of this proposal commented that direct presentment would minimize the potential for fraud. National City Corporation, Cleveland, Ohio, commented, "To the extent that the proposal is employed, it would allow banks to determine the collectibility of checks/drafts in less time than otherwise would be the case, thereby reducing the risk of loss." The majority of the commenters that supported the direct presentment proposal indicated that they preferred the adoption of both the proposal requiring a local routing number in the MICR line and the direct presentment proposal.

A number of commenters indicated that they would like to have the option of direct presentment but did not indicate if they would actually present directly to the bank on which the checks are written, rather than to the payable through bank, if this proposal were adopted. The Chicago Clearinghouse

Association stated, "The Association supports direct presentment of payable through items to the paying institution as an optional method of collecting such items . . . . In many cases, the option of direct presentment would be effective for speeding the forward collection process. However, we recognize that some collecting banks may not wish to exercise this option."

A small number of commenters suggested that the Federal Reserve should facilitate direct presentment. The United States League of Savings Institutions stated, "Having the Federal Reserve make direct presentments overcomes the cost prohibitiveness of having individual depositary banks making a presentment. Concentrating payable-through check volume at District Federal Reserve Banks makes this direct presentment alternative much more feasible." Continental Bank commented, "Our support for this option is also contingent on the Fed expanding its current fine-sort option to facilitate the direct presentment of payable through checks to the 'paying bank'. If this Fed expansion is not achieved, there would be no economical way to get the payable through checks presented directly to the individual credit unions."

Bank commenters noted that direct presentment would be used primarily by banks that have both the resources to perform this function and the volume to justify the expense. The Key State Bank, Cwosso, Michigan, commented, "Allowing banks to present the items directly to a local credit union is only

practical if sufficient volume allows a separate 'break out' of these items and ample capacity in the bank's equipment is available for a separate sort of these items."

Commenters noted that direct presentment would be useful in the case of large-dollar checks. The Bank Administration Institute commented, "Direct presentment does make sense, however, in the case of large dollar items. It is not uncommon for banks to single out large dollar checks for special handling. By presenting these items directly, a bank can often reduce float by accelerating the collection of funds. It also allows banks to determine the collectibility of items more quickly, reducing the risk of loss."

A small number of commenters noted that adoption of this proposal would simply clarify current law that provides that bank payable through checks can be presented directly to the credit union. The American Bankers Association stated, "Currently, old case law and Article 3 of the Uniform Commercial Code (UCC) might suggest that a 'drawee bank' (payor bank) may properly refuse to pay a check made payable through a particular bank when the check is not presented to the drawee by that bank. However, we believe that section 4-204(2) of the UCC . . . already authorizes collecting banks to send items directly to the payor bank. The Board should resolve this ambiguity by stating that banks may present directly to the bank on which the check is written."

The credit union commenters that opposed this proposal indicated that they did not have the operational capabilities to handle direct presentment. The Salt River Project Federal Credit Union, Phoenix, Arizona, commented, "Permitting depositary institutions to present a payable through share draft directly to credit unions for payment will create additional operational problems, especially for small credit unions. Many do not have the personnel nor the cash on hand to respond to direct presentment. They also do not own the equipment to handle direct presentment, and would be reduced to the equivalent of clearing all share drafts by hand! This was the reason the payable through system was set up in the first place, to allow credit unions to offer a transaction account, without the costly capital investment in personnel and equipment. The proposed changes would destroy their ability to offer transaction accounts by destroying the system that allowed them to offer those accounts in the first place."

The Credit Union National Association commented that this proposal would "dismantle the credit union payable through system, thereby eliminating share draft accounts for members of 1,500 to 2,000 small credit unions. Many small credit unions that could afford a local processing option would be put out of the share draft business because they simply cannot handle direct presentments. (Many of them are not capable of handling their own on-us items without depositing them in another financial institution.)"

A number of credit union commenters discussed the cost implications of direct presentment. The Billings Health Affiliated Federal Credit Union, Billings, Montana, stated, "I have 3 full time employee's (sic), including myself, who handle 2,500 members. We could not begin to do the direct presentments. Expenses involved would be a new safe which would run about $8,000 to $10,000.00. A new staff person at $12,000.00 per year and any expenses incurred through purchase of new electronic equipment. My net income YTD for 1988 is $20,699.04. I am sure you can see that to make the required staff increases and equipment purchases would just not be feasible. We would most definitely have to drop our program."

A few credit union commenters discussed the transportation costs of this proposal. The Missouri Credit Union League, St. Louis, Missouri, commented, "If this proposal is adopted, credit unions receiving a direct presentment from a depositary bank would have to arrange for timely delivery of these items to the payable through processor. Besides being a logistical problem it also creates an economic burden. At a minimum, checks would need to be sent by overnight courier service since timely delivery is a key issue. This would result in a minimum daily cost per credit union of approximately $14. The daily cost to Missouri credit unions would be $1,400 under this method. For large cash letters, credit unions would need to consider 'next flight out' arrangements. The daily cost for this type of courier service would be $1,000."

The majority of the credit union commenters stressed the same reasons for opposing the direct presentment proposal as they used in explaining their opposition to the proposal requiring a local routing number in the MICR line. These commenters cited the cost, lack of operational capability, and the potential dismantlement of the national payable through program if this proposal were adopted. These reasons are more fully articulated in the discussion of the proposal requiring bank payable through checks to bear a local routing number in the MICR line.

Bank commenters opposed to this proposal commented that this proposal does not facilitate the assignment of availability on an automated basis. The Maryland National Bank commented, "Although we conceptually support [the direct presentment proposal]. . . we could not support this option in terms of an actual implementation for the following reason: Again, this option would not permit the automated processing of the credit union drafts. We believe that any option which may require special nonautomated check handling will only weaken the check collection system." The Bank of Boston, Boston, Massachusetts, stated, "The Bank believes that this proposal is unworkable since it does not relieve depository institutions from the onerous task of manual identification of bank payable-through drafts."

Bank commenters also noted that direct presentment was only feasible for large organizations because the majority of

banks would not receive enough share draft volume from one credit union in one day to make direct presentment worthwhile. The Alamo Savings Association of Texas commented, "This is not a practical alternative because of the transportation and settlement systems that would have to be developed to accommodate such direct presentment."

A small number of bank commenters discussed the cost implications of the direct presentment proposal. Provident National Bank, Philadelphia, Pennsylvania, commented, "It is also not a feasible alternative because of the large number of credit unions and the costs associated with direct presentment (transportation, cash letter processing and transaction costs). In addition to these costs are the costs associated with the manual outsorting of items and the manual intervention in those systems used to assign availability to customer deposits."

The Sovran Financial Corporation stated, ". . . to operationally effect direct presentment, we must manually sort through checks (in the case of one major payable through bank, some 30,000 items per day) to separate out those drawn on local institutions. To preserve some semblance of an audit trail, the items drawn on the distant payable through processor would have to be rerun on our high speed check sorting equipment, and another cash letter created. The smaller groups of items drawn on individual local issuing institutions would similarly have to be rerun. Depending on the internal cost structures of individual banks, the incremental per-item cost to rerun these items could range from $0.005 to $0.012 cents per item pass. We estimate, given current annual volumes of payable through drafts cleared through one major national payable through processor, that reprocessing these items would cost us approximately $70,000 per year--excluding any forward presentment fees that we might also incur. Reconcilement and adjustment costs due to errors following from such a manually intensive endeavor would rise as well." Bank of America estimated that the cost of sorting the checks manually for direct presentment would be $800,000 per year.

Very few commenters commented on the appropriate lead time for implementation of this proposal. Suggested time frames ranged from immediately upon adoption of the amendment to three to four years after adoption.

The Board believes that there is not sufficient justification to clarify by regulation that a bank payable through check can be presented directly to the bank on which it is written. Therefore, the Board has not adopted this proposal.

Miscellaneous Recommendations. A number of commenters suggested alternatives other than the proposals issued by the Board. A small number of commenters noted that they disagreed with the Board's decision not to appeal the court ruling and urged the Board to appeal the ruling. First Pennsylvania Bank, Philadelphia, Pennsylvania, stated, ". . . we urge the Board to

reconsider their previous position on this matter and to appeal the Federal court ruling concerning the treatment of payable through checks."

Some commenters recommended that the Board should seek amendments to the Act. The United BN Credit Union, St. Paul, Minnesota, stated, "Save the taxpayers money by sending your proposals for comment to all Congressmen and suggest they amend the law. They could amend the law to say checks drawn on local banks are local checks and checks drawn on nonlocal banks are nonlocal checks, PERIOD." The Board supports an amendment to the Act that would amend the definition of "originating depository institution" to mean the branch of a depository institution on which a check is drawn or through which a check is payable. If this amendment were enacted, the payable through bank would be defined as the paying bank in the regulation for the purpose of determining whether a payable through check is a local or nonlocal check.

A number of commenters requested the Board to require that bank payable through checks be deposited with a special deposit slip in order to receive local availability. Marine Midland Bank commented, "If the proposal to MICR encode a routing number which is local to the paying bank is not adopted by the Board, Marine would request the Board to consider permitting banks to require that bank payable through checks be deposited in person with a special deposit slip to a bank employee in order to get availability according to the schedule for local paying banks, if the paying bank is not in the same check processing region as the payable through bank." This would require an amendment to the Act because, under the Act, the Board does not have the authority to lengthen the availability schedules by requiring the use of special deposit slips as a condition for providing local availability to certain payable through checks.

A small number of commenters recommended that the Board should document the fraud, if any, caused by payable through checks and, if necessary, suspend the regulation for payable through checks. The Missouri Credit Union League commented, "Since the Fed has the authority to suspend the Regulation for certain classes of items, this appears to be more than adequate protection for the participants in the check collection system. Rather than be proactive without cause, a more prudent approach is to be reactive with cause."

The Independent Bankers Association of America recommended "that the Board adopt an amendment to Regulation CC requiring credit unions with payable through share draft programs to respond on a timely basis, to all inquiries from depositary banks on items over $500." A similar proposal was issued for public comment in December 1987, which would require banks issuing cashier's or teller's checks or certifying checks to respond to such inquiries. Several commenters on that proposal indicated that the provision would not protect depositary banks

completely because many forgeries and counterfeits would go undetected. They also noted that depositary banks would not know where to direct the inquiry within the paying bank to obtain reliable information, or may not be able to contact or receive a response from the paying bank within a reasonable time. Therefore, the Board does not believe this proposal should be issued for public comment.

A number of credit union commenters requested that the Board delay consideration of these proposals to allow sufficient time to evaluate the effects of Regulation CC on the check collection system. CBI Oak Brook Federal Credit Union commented, ". . . give the new system a year to function and gather some facts and figures on nonlocal payable-through-bank returns. There might be better ways to solve this liability problem in the future (if it exists) than the proposals that have been made." A number of depositary banks have expressed concern about their ability to comply with the revised regulation, and the Board believes it is appropriate to adopt amendments at this time.

FINAL REGULATORY FLEXIBILITY ANALYSIS

The Regulatory Flexibility Act (5 U.S.C. 601-612) requires an agency to publish a final regulatory flexibility analysis when it promulgates a final rule. Two of the requirements (5 U.S.C. 603(a)(1) and (2)) of a final regulatory flexibility analysis, (1) a succinct statement of the need for, and the objectives of, the rule and (2) a summary of the issues raised by the public comments in response to the initial regulatory flexibility analysis, a summary of the assessment of the agency of such issues, and a statement of any changes made in the proposed rule as a result of such comments are contained in the supplementary material above.

A third requirement of a final regulatory flexibility analysis (5 U.S.C. 604(a)(3)) is a description of each of the significant alternatives to the rule consistent with the stated objectives of applicable statutes and designed to minimize any significant economic impact of the rule on small entities which was considered by the agency, and a statement of the reasons why each one of such alternatives was rejected. As described in the above preamble, the Board included in its initial proposal several alternative rules, and requested and received comment on the cost and risk associated with each alternative for all affected entities, both large and small.

After considering the comments and the costs and benefits of the various alternatives on the affected entities, the Board adopted a final rule which it believes will have the minimum impact on small entities, generally credit unions, while still achieving the objectives of the rule. The reasons for the Board's final determinations are more fully described above. The Board did not, however, either propose or adopt an exemption from coverage for small institutions that use payable through checks.

The purpose of the rules published today is to alleviate the operational difficulties and risk associated with the acceptance of payable through checks by depositary banks. This purpose would be defeated if the rules did not apply to small institutions that use payable through checks because the operational and risk problems for their checks would remain.

List of Subjects in 12 CFR Part 229

Banks, banking; Federal Reserve System.

For the reasons set out in the preamble, 12 CFR Part 229 is proposed to be amended as follows:

PART 229 -- AVAILABILITY OF FUNDS AND COLLECTION OF CHECKS

1. The authority citation for Part 229 continues to read as follows:

Authority: Title VI of Pub. L. 100-86, 101 Stat. 552, 635, 12 U.S.C. 4001 et seq.

2. In § 229.36, the heading is revised and a new paragraph (e) is added to read as follows:

§ 229.36 -- Presentment and issuance of checks.

* * * * *

(e) Issuance of payable through checks. A bank that arranges for checks payable by it to be payable through another bank shall require that the following information be printed conspicuously on the face of each check:

(1) the name, location, and first four digits of the nine-digit routing number of the bank by which the check is payable; and

(2) the words "payable through" followed by the name and location of the payable through bank.

This provision shall be effective February 1, 1991, and after that date banks that use payable through arrangements must require their customers to use checks that meet the requirements of this provision.

3. In § 229.36, paragraph (d) is redesignated as paragraph (d)(1), a new heading is added to paragraph (d), and a new paragraph (d)(2) is added to read as follows:

§ 229.38 Liability.

* * * * *

(d) Responsibility for certain aspects of checks

(1) * * *

(2) Responsibility for payable through checks. In the case of a check that is payable by a bank and payable through a paying bank located in a different check processing region than the bank by which the check is payable, the bank by which the check is payable is responsible for damages under paragraph (a) of this section, to the extent that the check is not returned to the depositary bank through the payable through bank as quickly as the check would have been required to be returned under § 229.30(a) had the bank by which the check is payable --

(i) received the check as paying bank on the day the payable through bank received the check; and

(ii) returned the check as paying bank in accordance with § 229.30(a)(1).

Responsibility under this paragraph shall be treated as negligence of the bank by which the check is payable for purposes of paragraph (c) of this section.

* * * * *

4. Appendix E -- Commentary to Part 229 is amended to read as follows:

a. Section 229.36 is amended by revising the heading and adding a new paragraph (e).

Appendix E -- Commentary

* * * * *

Section 229.36 Presentment and issuance of checks

* * * * *

(e) Issuance of payable through checks.

If a bank arranges for checks payable by it to be payable through another bank, it must require its customers to use checks that contain conspicuously on their face the name, location, and first four digits of the nine-digit routing number of the bank by which the check is payable and the legend "payable through" followed by the name and location of the payable through bank. The first four digits of the nine-digit routing number and the location of the bank by which the check is payable must be associated with the same check processing region. (This section does not affect § 229.36(b).) The required information is deemed conspicuous if it is printed in a type size not smaller than six-point type and if it is contained in the title plate, which is located in the lower left quadrant of the check. The required information may be conspicuous if it is located elsewhere on the check.

If a payable through check does not meet the requirements of this paragraph, the bank by which the check is payable may be liable to the depositary bank or others as provided in § 229.38. For example, a bank by which a payable through check is payable could be liable to a depositary bank that suffers a loss, such as lost interest or liability under Subpart B, that would not have occurred had the check met the requirements of this paragraph. The bank by which the check is payable may be liable for additional damages if it fails to act in good faith.

b. Section 229.38 is amended by redesignating the first three paragraphs of paragraph (d) as paragraph (d)(1); by adding a new heading to paragraph (d); by adding a new paragraph (d)(2) to follow newly redesignated paragraph (d)(1); and by revising the last paragraph of paragraph (d) to read as follows:

Section 229.38 Liability

* * * * *

(d) Responsibility for certain aspects of checks

(1) * * *

(2) Responsibility for payable through checks. This paragraph provides that the bank by which a payable through check is payable is liable for damages under paragraph (a) of this section to the extent that the check is not returned through the payable through bank as quickly as would have been necessary to meet the requirements of § 229.30(a)(1) (the 2-day/4-day test) had the bank by which it is payable received the check as paying bank on the day the payable through bank received it. The location of the bank by which a check is payable for purposes of the 2-day/4-day test may be determined from the location or the first four digits of the routing number of the bank by which the check is payable. This information should be stated on the check. (See § 229.36(e) and accompanying Commentary.) Responsibility under paragraph (d)(2) does not include responsibility for the time required for the forward collection of a check to the payable through bank.

Generally, liability under paragraph (d)(2) will be limited in amount. Under § 229.33(a), a paying bank that returns a check in the amount of $2,500 or more must provide notice of nonpayment to the depositary bank by 4:00 p.m. on the second business day following the banking day on which the check is presented to the paying bank. Even if a payable through check in the amount of $2,500 or more is not returned through the payable through bank as quickly as would have been required had the check been received by the bank by which it is payable, the depositary bank should not suffer damages unless it has not received timely notice of nonpayment. Thus, ordinarily the bank by which a payable through check is payable would be liable under paragraph (a) only for checks in amounts up to $2,500, and the paying bank would be responsible for notice of nonpayment for checks in the amount of $2,500 or more.

Responsibility under paragraphs (d)(1) and (d)(2) is treated as negligence for comparative negligence purposes, and the contribution to damages under paragraphs (d)(1) and (d)(2) is treated in the same way as the degree of negligence under paragraph (c) of this section.

By order of the Board of Governors of the Federal Reserve System, July 28, 1989.

(SIGNED) Jennifer J. Jones

Jennifer J. Johnson
Associate Secretary of the Board

Senator **Sarbanes**. Thank you very much, Mr. Chairman.

In view of the number of members that are here, I think we will do a 7-minute round, and then we can come back and do a second round if members still wish to proceed, and I would ask the staff to time us on that.

Mr. Chairman, I gather that while you've left the ranges for monetary growth at the same figures as before, as I understand it, what you're indicating is that you hope however to have growth at levels within the range higher than they have been heretofore; is that correct?

Chairman **Greenspan**. You mean heretofore meaning so far this year?

Senator **Sarbanes**. Yes.

Chairman **Greenspan**. Yes. In fact, both M2 and M3 are now within the ranges, and we expect them to stay there for the remainder of this year.

Senator **Sarbanes**. You hope to have them not at the low end of the range, I take it.

Chairman **Greenspan**. I would think not. My impression is that they will move toward the center of the range. It's difficult to forecast, but they could conceivably go above the center of the range.

Senator **Sarbanes**. There are some who take the view that our economy does not function very well at low growth rates and that in fact sustaining a positive rate of growth under 2 percent without slipping into a recession is very difficult to do.

QUARTERS OF GROWTH UNDER 2 PERCENT

First of all, I would like to ask you how many quarters of growth under 2 percent do you anticipate?

Chairman **Greenspan**. It's very difficult to forecast, Mr. Chairman. It should occur through a good part of the forecast period if one takes as the standard the forecast of the FOMC. But I don't think we can forecast to a level of even one percentage point with great accuracy. My impression is that we will be slow for a period, but that we will pick up at some point. I would hate to designate when that point might be, because I don't think we can in all reasonableness.

Senator **Sarbanes**. Looking back historically, has the U.S. economy ever experienced a prolonged period of very slow growth without slipping into a recession?

Chairman **Greenspan**. I don't think so. And I think the reason for that is largely that in past periods when we start to slow up, we slow up in the context in which the markets expect that the economy will continue to move ahead. That does induce a significant backing up of inventories and usually leads to the classical inventory recession which has been so characteristic of our past history.

It seems at the moment that inventories are in much better shape than they typically are both with respect to levels and with respect to growth, and while there is very minor evidence that in certain areas of the economy there has been some backing up, in general that has not been the case. I think that the expectation of continued slowness has had the effect of adjustments occurring before an unanticipated build-up of inventories or imbalances occurs.

But I would certainly say that a necessary condition to keep a moderate growth path in place is that the markets generally assume that will be the case because if they assume significant acceleration and it doesn't occur, then the economy would back up and turn down. At the moment that does not appear to be the case.

ECONOMIC SUMMIT CONFERENCES

Senator **SARBANES**. Do you think the Central Bank Governors ought to be present at the Economic Summit Conferences?

Chairman **GREENSPAN**. You mean the one that was in Paris?

Senator **SARBANES**. Yes.

Chairman **GREENSPAN**. We never have been. I was at the first Summit, in fact the first two Summits, as Chairman of the Council of Economic Advisers. It has essentially been a vehicle by which the President, the Secretary of the Treasury, and the Secretary of State have carried the position of the U.S. Government.

I can argue on both sides of that. I think that I see no need for Governors, Central Bank Governors to be there. We do, of course, meet with the Finance Ministers in the regular G-7 meetings and, as best as I can judge, all that is required with respect to coordination occurs at that point.

Senator **SARBANES**. Well, the Summits actually are getting more and more away from economic issues. This Summit in fact, the first communique dealt largely with political issues, and the major communique was devoted a third or more to environmental issues. And there is a real question about, and we may change the purpose of the Summits, and then we shouldn't call them Economic Summits, but I guess the question is if they are to be Economic Summits, and given the importance of monetary policy, whether having the World Central Bank Governors also present wouldn't contribute to maintaining that focus.

Chairman **GREENSPAN**. It is possible, Mr. Chairman. All I can say to you is that I don't feel strongly one way or the other about it because I think that we get our input in, as is necessary, as a group, through the regular G-7 meetings.

Senator **SARBANES**. The IMF projected in April that the U.S. current account deficit would expand from $135 billion last year to $139 billion this year and $154 billion next. This projection was made before the recent rise in the dollar. If the dollar remains at its present level, what do you believe will happen to the U.S. trade and current account balances this year and next?

Chairman **GREENSPAN**. It's fairly clear that the strength in the dollar has slowed the adjustment process. I don't think it has terminated it. I still think that there is considerable momentum in the export markets. We still have unfilled orders for exports rising, which means that new orders are coming in at a rate above the actual shipments. That in a sense, says that the increase in the value of the dollar has not significantly inhibited our exports just yet. It is true that they have slowed from their pace of advance in 1988, but they are still fairly significant.

My view is that the adjustment process has to continue and I think will continue perhaps after some pause, as I have indicated in earlier periods, but ultimately I think the deficit will start to decline again, and my best guess is sometime next year in a significant way.

I think we have to be careful to remember that there is more involved in these adjustment processes than strictly the issue of exchange rates. The real fundamental adjustments have got to occur with respect to the basic saving and investment balances, and clearly the growth rates of the United States relative to our trading partners is a very significant factor in these adjustments.

So in summary let me just say that I would expect perhaps not much in the way of movement in our trade balance in the months ahead, but probably starting to continue to improve again after the very dramatic improvement in the first half of 1988.

Senator SARBANES. Let me just ask this final question. Given the very large borrowing that is associated with these continuing large trade deficits, what does it portend for U.S. financial strength in the world economy and the role the United States can play in resolving international economic problems?

Chairman GREENSPAN. Well, Mr. Chairman, I think it's fairly apparent, despite the very large increase in external claims on the United States, almost all denominated in dollars, that that has not deterred the desire on the part of portfolio holders around the world to continue to increase their dollar holdings.

Senator SARBANES. Has your policy at the Fed been constrained by the need to keep the U.S. attractive to foreign lenders?

Chairman GREENSPAN. No. I would say that while obviously we watch what the exchange rate is doing and its effect in the international markets, it is only when we view it as having a major impact on domestic economic activity or inflation that we believe that American economic policy need address the exchange rate in a significant manner.

Senator SARBANES. Senator Heinz.

Senator HEINZ. Thank you, Mr. Chairman.

Chairman Greenspan, first I would like to compliment you for your testimony at the bottom of page 14 and the top of page 15 for the most articulate expression of why this country and why you or whoever sits in your chair must do a very good job of fighting inflation. I think you have done the best job I've ever seen or heard anyone do expressing more articulately the pernicious effects that inflation can exact, particularly in a democracy like ours, and I do commend you for that.

Chairman GREENSPAN. Thank you.

Senator HEINZ. You also, of course, point out quite correctly that you don't want to win the battle and lose the war, by which I mean kill inflation and kill the economy at the same time. You describe that as a delicate balancing act, and so it is.

You indicate that over the long term, and here I cite page 12, that fundamentally what will be required for this country to continue to grow and grow in real terms is to enhance investment and have a higher national savings rate, and you say that most interestingly, that improvement in our international payments position is going to require productivity enhancing investment and a higher national savings rate.

Now one of the things you say we should do is reduce the federal budget deficit, which certainly we agree with, but what else should we do besides that?

Chairman **Greenspan**. Senator, when we finally get beyond the immediate problems of the savings and loan difficulties, and when hopefully we get our budget deficit resolved sooner rather than later, it's important that economic policy in this country focus on what is the most efficient element in our system, namely, an adequate level of saving.

SAVING RATES DEFICIENT

We at the Federal Reserve and I think other agencies of Government—the Council of Economic Advisers and the Treasury Department—obviously are beginning to look at the process in a manner which interfaces with potential policy. We are relooking at the tax incentive effects and we are looking at the structure of our markets to try to understand why is it that our saving rates are currently so deficient when it has not necessarily been so in America's past.

On the contrary, in fact, between the Civil War and the World War I our saving rates were the highest in the world. So there is nothing culturally built into our society which requires that.

Senator **Heinz**. Unless you think this country has changed.

Chairman **Greenspan**. Unless it has changed, which I doubt. I mean I don't think it has changed enough to suggest that we cannot restore the levels of saving that has characterized this country in earlier periods.

So while I can't address your question in a confident manner at the moment, I should hope that within a reasonably short period those of us who are looking at this process will be coming to the Congress to offer suggestions which might be helpful.

Senator **Heinz**. Do you anticipate doing that this calendar year?

Chairman **Greenspan**. I frankly don't know. I will say to you we are looking at the problem now, but my impression is it's probably more for the 1990 legislative period.

Senator **Heinz**. Well, let me encourage you, Chairman Greenspan, to do so. As you point out, we will be dealing with the next budget cycle early on next year, and it sounds to me like you hope to have something to us before we begin deliberations on the President's next budget and I hope that's true.

Chairman **Greenspan**. All I will say to you, Senator, is it is a very difficult problem. It's one which has exasperated economists for a number of years, but we will endeavor to do so.

Senator **Heinz**. That sounds only fair after all the exasperations that economists cause for everybody else, Mr. Chairman.

SOCIAL SECURITY TRUST FUNDS

But let me ask you about a specific issue. Right now the Social Security Trust Funds are generating annual surpluses in the neighborhood of, for fiscal year 1990, for example, around $70 billion excess revenues over expenditures. Being the Chairman, as you were, of the National Commission on Social Security Solvency, you well know that the purpose of having those annual surpluses was to, in effect, to have a reserve that would be sufficient to help pay the benefits for the baby boom generation when they retire without having to increase payroll taxes to unaffordably high levels.

Unfortunately, Congress is now treating that income, that surplus income, as if it is deficit reduction. It is used to reduce the calculation of the budget deficit and in the Gramm-Rudman-Hollings numbers.

Clearly, if we continue to do that, we will report a string of budget deficit numbers that is lower than the string of increases in the Federal debt because we will be writing, in addition to the usual pieces of paper that says I, Uncle Sam, owe you, the public, a lot of money, we will at the same time be writing the Social Security Trust Fund an increasingly large number of similar pieces of paper, and the only difference is that it will be the Social Security Trustees who hold the paper rather than the general public

It seems to me that there is an outstanding opportunity for the United States to increase its saving rate if we would stop the practice of spending the annual Social Security surplus as if it was deficit reduction and in fact we actually saved it.

Now that would mean that by 1993 under Gramm-Rudman if we do our job we get down to a zero deficit. If we did not spend that money as we are now, we would actually be running in aggregate terms a surplus, and it would be a modest surplus. It would be under a hundred billion dollars a year.

My recollection is that the National Economic Commission disagreed on everything except one thing. The one thing they agreed upon is that we shouldn't spend the Social Security Trust Fund reserves like we are now.

My question to you is this. First, do you agree with the National Economic Commission and then their membership on that point and, second, since some people say a surplus is deflationary and can slow down the economy, is that true and, to the extent it is true, how do we deal with that?

Chairman GREENSPAN. Well, Senator, let me answer the second question first.

In today's environment it's credible to me that a surplus, and hopefully a chronic surplus, in our unified budget account would be deflationary. Obviously the British at this particular stage have a very large surplus and there is no evidence that that in fact, in and of itself, has been deflationary. It need not be and shouldn't be.

Senator HEINZ. Is the other side of the coin, that deficits need not be inflationary and it depends how you finance them? If you finance them by printing money, they are inflation, and if you hold the line on credit, they are not?

Chairman GREENSPAN. It depends, in part, on a number of other facets of what is going on in the economy. Very specifically, because our private saving rate is low, were we to add to the aggregate national saving rate, the saving coming from the Federal Government, that would not be a level of saving which would be so inordinately large as to cause, as economists like to say, fiscal drag on the system.

Senator HEINZ. So we should look at the aggregate amount of saving and not just what the Federal Government is doing?

Chairman GREENSPAN. Exactly.

Senator HEINZ. The same way as we should look at the aggregate amount of debt.

Chairman GREENSPAN. Yes. It is the same issue from different sides. The problem that exists with respect to the Social Security surplus issue is not the desirability of saving it. In fact, saving it all would be highly useful to the American monetary policy.

There is a technical problem which causes me concern and leads me to the worry that Congress would not be able to hold to that position. That is the growing and, by the year 2000, very large intragovernmental interest payment from the U.S. Treasury into the Social Security Trust Fund. A very substantial part of the accumulated Social Security surplus, say by the year 2010 or 2015, turns out to be that interest payment, an interest on interest.

As a consequence of that, if one looks at this tremendous increase in the annual Social Security surplus and with a very large and growing part of that being interest payments from the Treasury, the other side of the same process is that there is a growing acceleration of interest payments from the Treasury to the Social Security Trust Funds, which when you consolidate them washes out and doesn't appear in the numbers.

So what concerns me is that that acceleration of interest, the intragovernmental interest would make the non-Social Security deficit increasingly large and very difficult to handle, and I'm fearful that were that to occur, we would then abandon the whole process.

So I would be inclined to try to find a means by which if we are going to literally save parts or all of the Social Security surplus, which I think is highly desirable, that we keep in mind that other process and make certain——

Senator HEINZ. The net interest problem.

Chairman GREENSPAN. Exactly, and make sure that we don't get upended by this extraordinary accounting process that would be going on.

Senator HEINZ. That strikes me, if the Chairman, and I see the red light is on, will permit me, that strikes me as a question of management accounting for the Congress to consider, not that that's our strongest field, mind you, but I don't think that with the brain power that we've got that that problem need sink the ship. It seems to me to be a solvable, if not necessarily facile problem to solve.

Chairman GREENSPAN. Yes, and one solution is to save the noninterest part of the growth in the Social Security Trust Funds.

Senator HEINZ. Yes.

Thank you very much, Mr. Chairman.

Senator GRAHAM of Florida [presiding]. Thank you, Senator.

Following the rule of first-come/first-question, it is now my opportunity to question.

I am going to ask questions in three areas. One is the savings and loan issue, second is the Third World debt and, finally international interest parity.

Starting with the first question, in February of this year we had a discussion on the administration's projections as to how much the savings and loan industry could contribute to the bailout plan, specifically as to whether the projection of a 7-percent deposit growth, which was assumed in the administration's projection, was realistic.

In your testimony today you state on page 6 that FSLIC insured institutions began losing deposits at a significant rate. These deposit withdrawals were particularly strong in the first quarter of this year.

Based on the history that has occurred since February, do you have any further comments as to whether you believe a 7-percent deposit growth rate is a reasonable expectation for the savings and loan industry?

Chairman GREENSPAN. Mr. Chairman, it clearly is on the high side, but I wouldn't necessarily say that the experience that we have had in recent months in any way alters the probability of how that growth will emerge. It's fairly clear that until we have gotten through the problem of reconstituting a number of these associations and restoring the confidence that we believe consumers will again have in thrift institutions, until that is done, it's not easy to see what track of growth will occur in those institutions.

While 7 percent is probably on the high side, it is technically achievable, and I wouldn't automatically rule it out.

It is certainly true that if you lower that assumption, you get somewhat different assumptions about the sources and uses of funds with respect to the so-called bailout, but I don't think they are of an order of magnitude which concerns me greatly.

Senator GRAHAM. The consequence of lowering the expected rate of growth of depository insured funds within the savings and loan industry is to reduce the level of contribution which the industry can make toward the bailout and therefore increase the portion of the bailout which will be paid by the taxpayers; is that correct?

Chairman GREENSPAN. That is correct, Mr. Chairman.

Senator GRAHAM. Given what has in fact occurred to the industry over the last 3 to 4 quarters, which has been a decline in deposit base, what percentage increase would be required for the next 3 or 4 years in order to recapture what has been lost and accelerate to the average of the 7 percent upon which the industry contribution is currently predicated?

Chairman GREENSPAN. If I may, Mr. Chairman, I would like to put that in the record because I don't recall offhand exactly what the percentage change is to bring us back to the long-term level projected in the official document but I will submit that for the record.

[Chairman Greenspan subsequently submitted the following in response to a question from Senator Graham:]

In view of the decline in total deposits at FSLIC-insured institutions over the last several quarters, deposit growth would have to accelerate to roughly a 9-percent rate over the next 3 or 4 years in order to lift growth to a 7-percent average from its September 1988 base.

FINANCING OF THE S&L BAILOUT

Senator GRAHAM. One of the consequences of an understatement of what the industry can contribute and therefore an increase in what the taxpayers' contribution will be would be the potential that the level of taxpayer contribution which is contemplated in the current Conference Committee report will be deficient and we would have to have another round of taxpayer contributions towards the overall financing of the bailout.

In that context, I would like to go to the question of the most appropriate means of financing the taxpayers' portion, and specifically whether it should be paid through some immediate or relatively short-term contribution, such as a proposal that was voted on in the House of a short-term tax increase in order to immediately finance the taxpayers' portion, or if we go to a longer-term provision, whether it should be financed through direct Federal borrowing or through the use of an independent agency.

You have recently written to the Congress recommending the third approach, which is the use of an independent agency. Could you assess, particularly in the context of the possibility that additional taxpayer financing will be required in part due to the slower than anticipated growth of the S&L industry deposits what you think the ramifications of those three approaches would be, and a further explanation of your preference for approach No. 3.

Chairman GREENSPAN. Mr. Chairman, let me repeat what I believe I said in an earlier meeting of this committee. We don't know exactly what the actual cost of the so-called bailout will be. We know within a rough approximation, more than adequate to know the form of the legislative structure that should be instituted, and I must say that I believe that the general configuration that has come up in the Senate and in the House does meet the requirements that I envisaged for financing and restructuring the industry.

Even if we knew exactly what the cost would be, it wouldn't help us. We are going to have to relook at this issue in a couple of years to fine tune it, either reducing or increasing the commitments that would be involved. And it is not only the rate of growth in thrift deposits which affects that estimate, but perhaps a far greater element will be whether or not the underlying losses that are currently estimated are larger or smaller than anticipated. So we really will not know until a later time. So I merely suggest to you that how that is met is something which we probably will not know enough about for at least a year and maybe 2 years.

I originally and continue to support the so-called off-budget means of financing, the one embraced by the full Senate. The reason is wholly an issue of Gramm-Rudman-Hollings and fiscal responsibility and has, of course, nothing whatever to do with the savings and loan issue per se.

My basic concern with the on-budget with exemption alternative is not whether it is on-budget or off-budget, but it's the exemption process itself which I am fearful could become too general and used in a variety of other vehicles of financing which would ultimately break down the Gramm-Rudman-Hollings process.

I obviously could not have that objection, and technically do not on the question if one wanted to finance the whole savings and loan thing with taxes. I don't think it's a practical thing to do, and I'm not supportive of it, but it would not be an issue of a Gramm-Rudman-Hollings exemption.

It is far more difficult to replicate the off-budget alternative, as I see it, and, hence, far more supportive of budgetary discipline implicit in Gramm-Rudman-Hollings. In addition, of course, it does lock in the thrift industry's contributions to the bailout process, which would be somewhat more difficult with the so-called on-budget exemption procedure.

Senator GRAHAM. One final question. A concern which is implicit in your letter of July 12 and the comment that you've just made is that the capital markets would respond adversely to what would be appear to be a weakening of our resolve to achieve budget balance and discipline.

What would be the principal specific indicators of that adverse market reaction that you would point us to, particularly in the period of the last week since the Conference Committee has decided to recommend to the full Congress an on-budget approach to financing the S&L bailout?

Chairman GREENSPAN. I think the issue is not so much the specific choice that would affect the markets, but it's the concern that would emerge if it was perceived that fiscal responsibility was breaking down in this country.

I think the progress that has been made in recent years in bringing down the budget deficit has been a marked factor, an important factor in the reduction in long-term nominal interest rates. I would look for signals which somehow suggested that there was a disaffection within the financial markets both domestically and internationally.

Senator GRAHAM. And have there been any signals that you would point us to?

Chairman GREENSPAN. Not to my knowledge at this stage. There is still confidence that we are moving toward a fiscally responsible reduction in our deficit.

Senator GRAHAM. Senator Mack.

Senator MACK. Thank you.

Again, welcome, Mr. Chairman.

In the last 5 or 6 years or so we have, the Congress and the country have pretty much focused on fiscal policy deficit reduction tax policy spending as a percentage of GNP.

I believe we are at a point where we need to focus on monetary policy, the direction towards zero inflation and low interest rates. A sustainable long-term growth that will lead us into the 21st Century I think is important, and for that reason I commend you on refocusing our attention on monetary policy and in difficult times are willing to take the heat in order continue that policy of reducing inflation.

I know that in the past you have said that we can't focus solely on the M's engaging monetary policy and that we ought to pay attention to what the markets are telling us as well, commodity prices, currencies, bond prices and even gold. We have seen recently, for example, the gold price over the past 1½ years declining from roughly 480 to below 375, and commodity prices have begun to be reduced.

I just would be interested in what are you looking at beyond the M's and what are these indicators, such as the ones that I've mentioned, commodity prices and currencies and bond prices telling you about the state of the economy?

Chairman GREENSPAN. Well, so far as inflation is concerned, over the long run I think the evidence unquestionably points to the fact that inflation is fundamentally a monetary problem. If our goal is to basically reduce inflation essentially to zero, which has the effect of bringing real interest rates down to a minimum, then I think we have to look at the various financial indicators of which money supply is one and credit and other elements are other factors.

We have devised a rather simplistic money supply analysis procedure which is one of the things we look at as sort of a gross proxy which says to us that one can achieve stable prices over the long run if the rate of growth of M2 is the same as the rate of growth of the potential in the economy.

Now that is a rough proxy for where we ultimately want to be, and it's our belief that if we get there in a stable manner, we will have inflation to a point where it is no longer acting as a corrosive force on our society or creating a level of real interest rates that are higher than we should wish to tolerate.

So far as the economy is concerned, other than inflation, it is our view that if we can achieve a stable noninflationary environment, that that is the major contribution that monetary policy can contribute to economic growth. That is not to say that there are many other elements that are involved. The tax issues and fiscal issues clearly are very crucially important as is regulation and a wide variety of a number of issues which we have discussed over the years.

But the essential long-term contribution that monetary policy can make to a stable, growing America with increasing real incomes and increasing standards of living is to make sure that we have a sound currency.

Senator MACK. In your response again you talked about quantifying I guess monetary growth as kind of the target that we're shooting for, but didn't respond to the other indicators I guess that I raised. I mean does that provide you with information as to whether you're on target or not on target?

Chairman GREENSPAN. In the short run it clearly does. The extent to which various elements in the economy are exhibiting excessive speculative pressures or compression does tell us what types of demands are going to be put on the financial system and, hence, what type of inflation pressures will ultimately emerge as a consequence.

MONEY GROWTH LINKED TO INFLATION

Senator MACK. In stating that monetary policy or money growth clearly is linked to prices, is it fair to say that the growth in the money supply, and I've forgotten the specific dates, but in 1987 and 1988 fueled the inflation that we experienced earlier this year or that we're experiencing now?

Chairman GREENSPAN. Well, there are some who would argue that the excess growth in money supply in 1985 and 1986 have done so. I think it's an arguable point, but clearly there is some spillover from rates of growth which are too high into the price level, if they start from a point in which the level of money supply is excessive. It's not only the rate of growth that is relevant, but the level from which that acceleration occurs, according to our studies.

Senator **Mack**. Do I draw from your earlier response that the objective then of the Federal Reserve with respect to money growth would be somewhere in the 2 to 3 percent range, and I'm talking about long term?

Chairman **Greenspan**. I would say ultimately yes. The target ranges that we view would ultimately be brought down into that range if we are committed to achieve a stable price level.

Senator **Mack**. Just me just raise one additional question, and again it goes back to your indicating the relationship between money and prices is without question, and we have already talked about again trying to quantify money growth is difficult, or the money supply is difficult.

There was a lead article in the Wall Street Journal editor page on June 29 by John Mueller. He argued that worldwide measure of the supply of dollars, which he calls the world dollar base, is more important in predicting U.S. growth and inflation than the domestic money supply numbers.

Did you happen to see that or are you familiar with that argument, and what is your response to it?

Chairman **Greenspan**. I am. I think it's an intriguing argument. The problem that I have with it is it doesn't work as well as one would think it did. Most of these money supply relationships work over the longer run and have not been very useful as indicators over the shorter run.

I mean, for example, a comparable notion is that the exchange rates should be a function of the ratio of the money supplies of the two different nations whose currencies are involved, and one would argue that obviously the more money you create of say dollars versus yen, the weaker the dollar should be. The trouble is the numbers don't work out that way, and I would say similar things with respect to that particular concept.

It is an interesting notion, and I think one should look at the so-called dollar base, which includes the dollar holdings of the Central Banks around the world as well as numbers in our domestic system, but I think you have to be terribly careful not to read too much into them as an indicator of what the world is all about.

Senator **Mack**. Thank you, Mr. Chairman.

Senator **Graham**. Senator Shelby.

Senator **Shelby**. Thank you.

ON BUDGET/OFF BUDGET FINANCING

Mr. Chairman, you've talked about it before, about on-budget and off-budget financing, and I believe, as it has been alluded to here today, that's going to be a fundamental question that we're going to have to face first whether we're going to waive the Budget Act in the Senate regarding the savings and loan financing, on budget/off budget.

I have my colleague from Texas here, and I'm sure we'll talk about it. He talks about it and does it well.

Let's talk about on budget/off budget and the growth of off-budget money in borrowing. It seems to me that whether it's on budget or off budget basically, that the money is being borrowed from a market out there, partly our savings, but not enough as you say, and rightly so, and partly the savings of the Japanese and the Swiss and the Germans and others in international markets.

But no matter what happens, if it's on budget or off budget, whether it's a savings and loan situation or anything else, that money is out there and it's capital that has to be raised somewhere in the market, am I correct on that?

Chairman GREENSPAN. Yes, Senator.

Senator SHELBY. OK. What is the downside, the real downside of putting this on budget versus off budget, and I'm talking about the savings and loan bailout, is it more political than economic, or is it some of both?

Chairman GREENSPAN. Well, remember that the crucial issue of on budget is an on-budget with a Gramm-Rudman-Hollings exemption. That's crucial.

Senator SHELBY. I understand that.

Chairman GREENSPAN. It's the exemption which is the problem.

Senator SHELBY. But is that exemption political in nature or economic or some of both?

Chairman GREENSPAN. It's political.

Senator SHELBY. It's political and not economic?

Chairman GREENSPAN. Yes, that's correct. The sole concern that I have with respect to this issue reflects the maintenance of the Gramm-Rudman-Hollings process which, aside from all its faults, has turned out to be the one mechanism that we have in this country to maintain fiscal discipline, and that is a political process. And to the extent that we undercut that, we are undercutting the viability of the financial system and economic stability in the future.

Senator SHELBY. Is a central question there whether Gramm-Rudman is a steel band or perhaps a rubber band?

Chairman GREENSPAN. I'm concerned that it may be no band.

Senator SHELBY. No band. If it's waived and continues to be waived, it would be meaningless as a major thrust?

Chairman GREENSPAN. That is my major concern, Senator.

Senator SHELBY. But going back to the off budget, how much money within certain figures, and I know you probably don't have it before you, have we borrowed, our agencies have borrowed off budget? How much money is owed off budget? I know there has been phenomenal growth there.

Chairman GREENSPAN. My recollection is that the so-called federally sponsored credit agencies, which are essentially off-budget items, are something under a trillion dollars.

Senator SHELBY. Under a trillion?

Chairman GREENSPAN. Yes, but not as much as I would like it to be. I think that's correct, 900-and-some odd.

Senator SHELBY. Can you furnish that information for the record and to this Senator.

Chairman GREENSPAN. Yes.

[Chairman Greenspan subsequently submitted the following in response to a question from Senator Shelby:]

As of the end of the last fiscal year, the federally sponsored credit agencies had about $330 billion of debt outstanding. In addition, two of the agencies had issued $388 billion of mortgage pass-through securities on which they had guaranteed the interest and principal. Adding the value of the pass-throughs to the direct debt of the agencies—and then subtracting the $55 billion of assets held by the sponsored agencies that were either insured directly by the Federal Government or were debt obligations of the U.S. Treasury—yields $663 billion, which is OMB's measure of sponsored-agency debt outstanding. In addition, the Federal Government had another $550 billion of guaranteed loans outstanding, resulting in a total of over $1.2 trillion of federally assisted debt.

Senator SHELBY. So you say it's under a trillion dollars, and then our own budget is 2.8?

Chairman GREENSPAN. Well, actually, no. The on-budget is modestly over two net, meaning excluding the public debt that is owned by the U.S. Government itself in its various trust funds.

Senator SHELBY. Let me get into another aspect of financing while I'm here and we've talked about it, and you've talked about it every time you've been before the committee, and I think rightly so, dealing with our fundamental problem of lack of savings. In other words, with the lack of savings in this country, we have to look outwardly to finance our deficit, which is a problem.

When we did we first start financing a lot of our deficit from international sources in recent times?

Chairman GREENSPAN. That last phrase did change my answer, Senator, because obviously we've financed a goodly part of our 19th century investment——

Senator SHELBY. Sure, I know that. I'm speaking in recent times, and let's say in the 1980's. Until 1980 were we able to internally finance our deficit by our own savings?

Chairman GREENSPAN. Yes. We did not reach a current account deficit until recent years.

Senator SHELBY. And what is that current account deficit now roughly?

Chairman GREENSPAN. Well, it's obviously well over $100 billion.

Senator SHELBY. And growing, it is not?

Chairman GREENSPAN. No, I don't think so.

Senator SHELBY. Do you think it's receding?

Chairman GREENSPAN. I think it will recede some.

Senator SHELBY. And do you attribute some of that receding to the Gramm-Rudman discipline measure that the Senator from Texas has authored and tried to keep in line, some discipline?

Chairman GREENSPAN. It's conceivable, but my concern rests upon reducing the Federal budget deficit. My concern is essentially the short-term Federal Government deficit and its effect on the financial markets and its effect on long-term inflation in this country and very specifically its relationship to the savings and investment balance. The major problem with our deficit is that it has subtracted from our domestic saving and made it very difficult for us to maintain productivity enhancing capital investment.

Senator SHELBY. Does that run up the cost of our capital investment, too?

Chairman GREENSPAN. In one sense you could say that the cost of capital is higher, meaning not the prices of the capital goods, but the real cost of capital is higher because that Federal Government deficit is higher.

Senator **Shelby**. Last, as the captain of the big rig out there, the economy and being the guardian of the economy, how is the soft landing coming along? It looks good now. Is it going to make it?

Chairman **Greenspan**. Well, I'm observing the phenomenon. Clearly the information we have to date has been favorable. I think we will make it, but I've been in the forecasting business for much too long to——

Senator **Shelby**. You've been very good at it.

Chairman **Greenspan**. Well, perfection is something to which we strive, but don't manage to achieve, and I think policy is on the right track. I think that what we are doing is the correct thing, and what we have done I think is the correct thing. I think we have succeeded in diffusing inflationary pressures and I think we have been correct in backing off as we have.

Senator **Shelby**. By policy are you referring to the monetary policy?

Chairman **Greenspan**. Yes, I'm talking about monetary policy only. Whether that achieves the ideal configuration of economic activity that we are seeking, I think is not yet evident, and we really will not be able to know the answer to that question until well into next year.

Senator **Shelby**. My time has expired. Thank you.

Senator **Sasser** [presiding]. Senator Gramm.

Senator **Gramm**. Thank you.

Mr. Chairman, let me thank you for coming here, and I hope you will forgive us if we are like the graduate students who come to get the old professor to give them what the right answer is. I remember often telling my graduate students when they would get in an argument that I wasn't sure what the answer was.

WAIVING THE BUDGET ACT

But I want to go back and try to touch on the key vote that we are about to take here in the Senate, and that is waiving the Budget Act to allow consideration of the Banking bill. Obviously it's something, as my mother would say, we have all prayed over.

I would like to begin by talking about this on budget/off budget, and I would like to outline very succinctly what I see the two plans as being composed of, and then I would like to ask your assessment as we have used the term under the First Bank of the United States, under the Second Bank of the United States and under the Independent Treasury since about 1840 which of these two plans would by traditional definitions be on budget and off budget?

The President's plan is a plan whereby the industry borrows $50 billion. They are liable for that $50 billion and they take existing assets and buy a zero coupon bond which matures in 30 years on the exact day that the $50 billion note that they are liable for matures. So they incur a liability which is 100 percent collateralized by a Government zero coupon bond.

The Treasury agrees over 30 years to pay interest on that note, and every penny of that interest every day that it is outlayed is counted as an outlay of the Treasury, is part of the deficit and is counted under the Gramm-Rudman-Hollings Deficit Reduction Law. That's the President's plan.

The alternative plan is a plan that says the Government, not the industry, would borrow the $50 billion. Clearly that is an outlay of the Treasury. So the deficit goes up by $50 billion. But having done that, and all interest is paid and all interest is counted on budget the same as the President's plan, but having incurred the liability of $50 billion. Then it says that in essence is a good deficit and we are not counting it in with that bad deficit, and we are not counting it as part. We'll have it, but we won't count it when we're measuring whether we are meeting deficit reduction targets.

Now my argument would be that a fully collateralized private liability that is 100 percent collateralized with a zero coupon bond would never in the history of the United States have been called a liability of the Treasury or called off-budget financing. On the other hand, I think saying we have a deficit, but we are not going to count it, that if that is not the essence of off-budget financing, I don't know what is.

So as I see it, not that these terms have any meaning other than their sort of PR impact, but it seems to me that it's hard to call the President's plan by the traditional definition off budget and it is hard to call the alternative plan on budget.

Would you give us your views on that issue as a person who has looked at this thing and looked at the economics of it for many years.

Chairman GREENSPAN. I think one of the problems that I have with this whole concept is that I would use slightly different criteria for so-called on-budget/off-budget—criteria that have been employed for many years by the Department of Commerce in the calculation of Federal spending and Federal deficit in the context of the national income accounts.

The economically significant difference really rests with whether or not the trend's action is a financial one and affects the financial asset and liability accounts of the Federal Government or whether it affects the purchase of goods and services.

And in the current context, since the liability that the U.S. Government now has with respect to the savings and loan issue is already there, meaning the full faith and credit of the U.S. Government is behind those thrift deposits and those institutions which have inadequate assets marked to market, in that sense we already have a Federal obligation. It is a financial obligation affecting the balance sheet.

What we are proposing to do to substitute for those deposit liabilities is a financial transaction which fills the hole on the asset side with U.S. Government credit. That item, when it occurs, will not appear as an outlay, as I understand it, in the national income accounts largely because it will be a financial transaction. It will be a movement of financial assets and liabilities and, hence, not a so-called purchase transaction. That is where I think the distinction critically lies with respect to the issue of on budget and off budget, and in that respect it would clearly be an off-budget transaction.

Senator GRAMM. I'm not sure, which one are you talking about?

Chairman GREENSPAN. The financial transaction would appear off-budget in either respect because it will reflect a financial transaction only, as I understand the way the accounts will be made.

Senator **Gramm**. You don't believe that the borrowing of the industry full collateralized by the zero coupon bond is a liability in any sense of the Treasury?

Chairman **Greenspan**. Well, certainly in a sense that what is involved there is the purchase of a zero coupon bond. It is a liability in that sense. But I certainly agree with the position you're taking with respect to keeping it off-budget.

Senator **Gramm**. So you really see the issue as coming down to the issue of the kind of precedent you set when you say this is a necessary deficit and so we are going to do it, but we're not going to count it toward deficit reduction. Your concern would be the next week you could do that for nuclear waste——

Chairman **Greenspan**. Yes.

Senator **Gramm** [continuing]. And the next week you could do it for the war on drugs and the next week you could do it for housing.

Chairman **Greenspan**. It's far more difficult to replicate the type of off-budget financing which you are recommending than it is to replicate an on-budget with an exemption. To that extent, and only to that extent, is the issue very crucially one of fiscal discipline, and my concern is that being on budget with an exemption has a more negative impact on fiscal responsibility than any form of vehicle which would endeavor to replicate the administration's financing vehicle.

Senator **Gramm**. Thank you.

Senator **Sasser**. Thank you, Senator Gramm.

I want to welcome you this morning before the committee, Mr. Chairman. In my view, you're testifying this morning at a critical time for our economy. The economic indicators, in my judgment, are not good. Economic growth is down to 1.7 percent annual real rate, and in June industrial production dipped by 2/10ths of one percent, retail sales fell by 4/10ths of one percent and housing and autos have been down from some time. So the trend is downward.

And when we look at the Fed's monetary policy, I'm pleased to see that we see some recent easing, three-quarters of a point, and that's welcome. But we have to look at the three point increase in rates that began about a year ago and factor that into the overall effect. There was a lot of tightening over the past year, and over the past 2 years we have had the slowest money growth since the 1950's.

Even the distinguished journalist, Alan Murry, of the Wall Street Journal, is saying that the so-called soft landing that we'll get if we're lucky is going to feel like a recession to a lot of people, and one of your colleagues over at the Fed, Martha Seger, is saying that it's going to be very difficult to land the aircraft in a nice gentle way. Instead Ms. Seger says we may take a wing off. I hope she's wrong, and Ms. Seger has been wrong before.

But from a fiscal perspective the soft landing could increase the budget deficit by an additional $25 billion, which would be of great concern to me and I expect to you and most other observers. Obviously should the economy experience a hard crash landing, we'll have a severely worsened deficit situation.

Now, Mr. Chairman, the Purchasing Manager Survey was released just a few moments ago and it points to continued slowing. The Purchasing Indicator came in a 46, which was below expectations, as I understand it, and below the 50 percent threshold for the third month in a row.

In view of that, and if we get July statistics that indicate job growth is continuing to decline, can we anticipate some further easing on the part of the Fed in the coming weeks and coming months?

MARKET RATES DECLINING

Chairman GREENSPAN. Well, Mr. Chairman, let me just first say that the relevant rates in the market which are affecting the economy are the market rates, and here, as I pointed out in my formal testimony, short-term money market rates are down a percentage point and a half since March. And, most importantly, long-term rates are at their lowest level in 2 years.

So in the sense of interest rates impacting on the economy, long-term interest rates have not gone up and in fact have been edging lower for quite a while, and this impacts on the mortgage market and on capital investment and has a very profound effect on overall activity.

It is certainly the case that we did move up short-term rates by 3 percentage points, and that had an effect on variable rate mortgages and some effect on housing. But I think the extent of how much impact we have had is not yet clear and will not be for a while.

Money supply growth was very slow for a good period of time after being excessively fast for a while, and in recent weeks has actually accelerated into double digit areas. So it has moved back up quite appreciably.

I can't forecast what Federal Reserve policy will be. It will depend to a very substantial extent on the evolution of economic events in the months ahead.

Senator SASSER. Well, frankly, Mr. Chairman, I really didn't expect you to answer that question. If you had, we would probably have had a rush for the telephones here by the journalists and others in this room.

In response to Senator Gramm's question you indicated that you favor financing the FSLIC bailout off budget, and that's well known. You have written a number of us and told us that. And as I understand your rationale principally, you believe that exempting the spending associated with the FSLIC problem from Gramm-Rudman would establish a precedent for other spending programs to be exempted. I think you may have reiterated that here this morning, and this in turn puts pressure on interest rates and it would cost the Government much more with escalating interest rates than the $150 million or so that the on-budget treatment supposedly saves per year. That's one rationale.

But as I understood the thrust of your statement this morning, your primary concern with the on-budget concept is that we escape the discipline of Gramm-Rudman if we put it on budget and then exempt it. Is that a fair statement?

Chairman GREENSPAN. Yes. Mr. Chairman, my major concern is the exemption issue. It is possible that the off-budget vehicle which has been recommended by the Treasury could be replicated and could create some fiscal problems, but it is very clear that it is far more difficult to do that. It is more unlikely that we will get an erosion of the Gramm-Rudman-Hollings process from replicating the off-budget vehicle in financing the bailout than an on budget with an exemption. It is strictly a political question in the sense that it is politically difficult to replicate, as far as I can see, the on-budget recommendations of the administration and very easy to request on budget with exemption if that becomes an oft-used and a desired vehicle. I think our fiscal discipline will erode, and I think that will be very costly to the Nation.

Senator SASSER. Well, Dr. Greenspan, I very much appreciate your candor in telling us that it is to some extent or to a large extent, in your judgment, a political question as opposed to an economic question.

Let me just follow it up with this question. There is some conversation here in the Congress about raising the Gramm-Rudman-Hollings' targets for 1991 and 1992. What would be your reaction to raising the Gramm-Rudman-Hollings for 1991 and 1992 and what would be the effect of that, in your judgment?

Chairman GREENSPAN. I would be opposed, Mr. Chairman, on the grounds that if you proceed to raise them, I think for all practical purposes the markets will assume that the process is dead and that fiscal responsibility has been significantly eroded in this country. I think it's the type of action which I would be most inclined to avoid if possible.

Senator SASSER. Let me impose on my colleagues, Mr. Chairman, to ask one more question on this whole question of on-budget/off-budget for FSLIC because it is a very important decision and some of us, and in fact we are all going to have to make that decision again here in just a very few days.

Some of the proponents of on-budget financing have argued that we can save a lot by going on budget because you wouldn't have to lock into the 30-year bonds the way you do when you finance off budget. They say if it's Treasury financed we could borrow short now when the interest rates are relatively high, and then come back in when the rates fall, as is generally anticipated they will do, and borrow long in a year or so when the rates are low. And they argue that if you go off-budget and lock yourself into these long-term bonds, you're not going to have that kind of flexibility.

Now my question to you is, is this a valid analysis, and would on budget save much more because it is more flexible?

Chairman GREENSPAN. I would like to engage in that discussion, Mr. Chairman, but you will observe that implicit in any answer I give to that question would be a forecast of interest rates, and I'm not about to get involved with that.

Senator SASSER. Well, I thought we were going to get you involved in that for just a moment, Mr. Chairman, but you saw through the question. [Laughter.]

But in the academic discussion that rates were to fall, would this analysis have any validity? You would be betting that the rates are coming down.

Chairman GREENSPAN. I think there are really basically two questions here. One is the maturity of the borrowing. In the off-budget plan there is a presumption of longer-term borrowing collateralized by a zero coupon bond. In on-budget it would tend to be the usual average configuration of bills, notes, and bonds, and it would be submerged in the total system.

It is indeed relevant where one forecasts interest rates to know which of the two, strictly from that point of view, is the cheapest for the American people. Leaving aside the forecast of interest rates, there is nonetheless an additional cost if we were, say, matching a long-term off-budget financing vehicle and an on-budget long-term financing vehicle, which would be, say, $150 million a year differential, depending on how many basis points additional cost.

The present value of that difference—meaning the amount of money you need up front to invest so that the interest received on that investment, plus the amortization—would pay the difference between the two types of bonds. That number is something between $1 billion and $1½ billion, and it strikes me as a very small insurance policy for the improved fiscal discipline that is embodied in the off-budget vehicle relative to the on-budget vehicle.

Senator SASSER. Thank you, Mr. Chairman.

Senator D'Amato.

Senator D'AMATO. Mr. Chairman, I want to first commend you for that last question and the Chairman for his explanation and putting some very real perspective without just politicizing one way or the other, and I'm not suggesting that you've engaged in that. But so often I think the proponents of whether it be on budget or off budget get into rather simplistic answers and that you did us a great service, Mr. Chairman, in your asking the question and the Chairman's response.

I'm not going to ask you about soft landings or crash landings. Rather you have been a constant force, Mr. Chairman, for encouraging increased savings. I believe it's one of the great problems that we have—capital formation or the lack of it.

Merrill Lynch just did a study recently which indicated that as a result of doing away with the IRA they estimate that we lost something in the area of $135 billion in additional savings. Some folks in Treasury would dispute that I know, but that's their study.

LEGISLATION TO BRING BACK THE IRA

Senator Dodd and I have been exploring a plan to introduce legislation to bring back a form of the IRA with a modification that we would allow the $2,000 contribution, but instead of permitting a total deduction at whatever your rate is, permitting a 15-percent credit, in essence limiting it to a $300 credit for $2,000 that is saved.

Do you have any suggestions or any modification which could be made to improve the savings incentives, whether it be by IRA or any other area?

Chairman GREENSPAN. Well, Senator, as I indicated earlier, we at the Federal Reserve and the analysts at the Treasury Department and at the Council of Economic Advisers are looking into the question of how can we improve the basic saving of this society because I think we would fully subscribe to your view that it is the crucial issue which is involved in the longer-term economic outlook for the country.

I haven't yet seen a satisfactory set of proposals because we haven't had a chance to really examine them, but I have indicated that when we get there and when we have something we feel is useful and helpful to the Senate and to the House of Representatives we will, of course, be bringing them forth.

One of the crucial issues with the IRA's is the determination of how much private saving is actually generated net. In other words, as we all know, for the IRA to basically create saving it has got to be a replacement of consumption for saving, and in a sense you've got to be able to say that we bought $200 less goods at some point and took those moneys and put it into the IRA account, because merely shifting from one account to another in the financial markets doesn't have any effect.

We haven't yet come to a conclusion of exactly how much of the IRA is real saving and how much of it is merely a shift.

Senator D'AMATO. Can I ask you, Mr. Chairman, to have your people take a look at that Merrill Lynch study and give us an analysis?

Chairman GREENSPAN. Certainly, we will. I'm not familiar with it, but we'll look at it.

Senator D'AMATO. We'll send you a copy of that. It's very interesting.

Let me ask you one other thing and shift a little bit to Gramm-Rudman. One of our colleagues asked whether or not adjusting the targets, what you would think about that in 1991–92. I share your concern. I think that would be a disaster. It would send the wrong signal to the marketplace, to the international marketplace that we are no longer wed to a program of reducing the annual deficit.

Let me ask you to rate Gramm-Rudman and its effectiveness. What would be the situation, in your opinion, were we not to have had Gramm-Rudman in place these past years?

Chairman GREENSPAN. It is very difficult, Senator, to make that judgment, and clearly it is not the ideal vehicle for fiscal restraint, but it works, and with all of its bells and whistles it seems to be the only thing we can construct which will work.

I don't know how much difference it has made with respect to where the deficits would be, but I think it's substantial. I couldn't put a number on it, but I must say to you I feel much more comfortable with that vehicle in place and functioning if our purpose is to get the budget deficit down significantly than were it eviscerated in any way.

Senator D'AMATO. Would I be incorrect in saying it's your obvious impression that there are those in the financial community who view this as, let's say, that last wall of resistance to unrestrained spending?

Chairman GREENSPAN. I would say that there are clearly a number of analysts within the financial community which if they saw the Gramm-Rudman-Hollings process swept aside would be very concerned about the fiscal viability of our budgetary process.

Senator D'AMATO. I thank you once again for giving us the opportunity of listening to you and asking you some questions as it relates to the economy and some of those things that are rather esoteric with so many, and I thank the Chairman.

Senator SASSER. Thank you, Senator D'Amato.

MEXICO'S DEBT

Mr. Chairman, let me turn your attention south of the border just a moment. We've come up with a new plan on Mexico's debt, and the recently announced accord on Mexico's foreign debt I think does offer some hope that Mexico's debt load can be reduced without too negatively impacting on American bank creditors.

But I must say to you that I'm concerned that debt reduction is only one of three options that the banks are being offered. The other two options are reductions of interest that is paid on the indebtedness and new lending.

Now a lot of observers think that the option that the banks are going to choose, or most banks are going to choose is going to be new lending because if they reduce debt they are going to have to take a hit on their capital and write that off. If they reduce rates, they will have to take a hit in their income statement, and that will depress the price of their stock, and the easiest and the course of least resistance would be to just simple make new loans to Mexico, which is essentially the old Baker plan.

But in the final analysis, this is not going to get, in my view, Mexico's debt reduced, and that really is the goal that we have to be pushing for, and that is to reduce this overhanging Mexican debt for political reasons in Mexico and for our own external political needs, and also to face reality here in our own country with regard to how much of this debt is actually collectable and how much the Mexicans can actually afford to pay off.

How do we get serious about this Mexican debt reduction, in your view, and how do you think the plan that is being offered now is going to work, and how serious is this whole Mexican debt problem?

Chairman GREENSPAN. Well, Mr. Chairman, actually I think the agreement that was reached is a very important one and one which I think will be most helpful to Mexico's economy.

I don't agree that the major part of the commitments will be so-called new money. From what we can observe looking at it from bank to bank, perhaps a little more than 20 percent will be new money and the rest will be either debt reduction or debt service reduction which has the same effect in lowering the external commitments of the Mexican Government.

As best I can judge, the agreement is going to be most useful to Mexican finances and I think helpful to the banks in the sense that they are restructuring their holdings in way which I think will be beneficial.

So actually I look at the agreement in a rather positive manner, and I think it was a very difficult agreement to reach, but it balanced the interests of Mexico and their creditor banks in a way which I think one wouldn't expect to come off that way.

The way I would look at it is as a major element to support Mexican growth, and the most successful way to bring debt down as a burden on one's economy is really economic growth. And I think that this will enhance the capability of the Mexican Government in so doing; and my view is that if things continue as they appear to be moving that within a reasonable period of time the Mexican Government and certainly the private sector will be financing in the so-called voluntary markets, and in fact there is already some indication that private institutions will be able to finance at some reasonable interest rates.

So I'm somewhat pleased by this process and think that considerable success was achieved by striking that agreement.

Senator SASSER. Mr. Chairman, Senator D'Amato referred a moment ago to the problem we have with the low savings rate here in the United States and this is something that has plagued us for a long time. The low savings rate, as you know, has gotten even worse in the decade of the 1990's.

There are a lot of reasons, in my view, why we Americans save less than our counterparts in other countries. One reason I sometimes think is the highly developed marketing techniques that we have here in the United States and the explosion in the use of credit cards.

Another I think is the decline of real income in families. We see now that many times it takes two wage earners to sustain the standard of living that one wage earner did in the past, and in order to maintain their standard of living that they are accustomed to that they will go deeper and deeper into debt.

But there are some tiny, little scintillas of hope on the horizon with regard to savings. Some commentators seem to think that there has been some indication in the last few months that the savings rate might be improving. Have you detected this and, in your view, what could be occasioning it if you agree with the assessment? Are consumers retrenching for fear of a recession or have they satisfied their needs for consumption, or is it just simply the fact that real incomes are going up and now they have more to save?

Chairman GREENSPAN. We don't know the answer to that yet, Mr. Chairman, but clearly the rise in the saving rate has been long overdue and it has been obviously one of the elements involved in the slowed retail sales markets, but it's difficult to know which is cause and which is effect.

I think that if we can sustain these saving rates, which are higher than we would have forecast earlier in the year, I think it would be beneficial, and I think it clearly is something which will assist us in the long term if it can be maintained.

Part of the softness in retail sales has occurred because the saving rate has been rising. If it merely stabilizes at this point and real incomes continue to rise, then consumption clearly will accelerate some. So it doesn't necessarily follow that if retail sales pick up that the saving rate must go down. In fact, we can basically maintain a relatively higher savings than we have had and still have room for some pick up in expenditures.

Senator SASSER. If real income would continue to go up, you could still have retail sales going up while at the same time the savings rate could go up if they have more real disposable income.

Chairman GREENSPAN. Yes, that's correct, Mr. Chairman.

Senator **Sasser**. Senator Graham, do you have any further questions?

Senator **Graham**. Thank you, Senator.

I have two areas of inquiry. One is to follow up on the question that you asked relative to the Mexico debt agreement.

Mr. Chairman, when we discussed the issue of Third World debt earlier this year, the question was asked what would be the criteria by which you would evaluate our management of the Third World issue, and you suggested three items in summary.

One, that the economic policies of the debtor nation should bring them into a position to be able to move into markets on a long term or intermediate term borrowing at rates which they could readily service.

Two, a restoration or normal borrowing/lending relationships between the debtor nations and the international commercial banking system.

And, three, that debtor nations which had done better than others, but which had been contaminated by the process, and you gave the example of Columbia, would find that their productive efforts were fully appreciated in the marketplace.

Applying these three criteria to the Mexican situation, how well would you say that the initial formulation of the plan will be, and what data or other objective indicators will you be looking for to see if the plan in operation fulfills these three criteria?

Chairman **Greenspan**. Well, Senator, I think that the Mexicans have moved toward a sensible and potentially productive economic policy, and that in fact is one of the major reasons why the international financial institutions, the banks, the Fund and the World Bank have been endeavoring to be as supportive as possible.

I see no reason to expect that those policies, sensible policies, will not continue in the context of this agreement, especially with the ability to reduce external financial requirements. If that occurs, as we have every reason to believe it will under this agreement, then I think that sound economic policies will then lead to meeting the second criterion, namely, the capability of moving into the financial markets in a voluntary way and borrow at rates which are serviceable.

Indeed, we already see some evidence that that may be in the process of occurring. Interest rates in Mexico in peso terms have fallen quite significantly since the agreement, and there has been for the first time in a very long time a private financing at an interest which was not intolerable as it would have been in dollars a while back. I think that process will continue.

It's too early to make a judgment on the so-called contamination effect, but I hope at some point that we will see that also working in an effective manner, but it is much too early to make that sort of judgment at this date.

Senator **Graham**. Do you see any further activities by your agency or would you recommend such by other agencies, including to the Congress in the form of tax modifications or otherwise, that would be appropriate to reinforce the Brady plan?

Chairman **Greenspan**. I think that has already been done in the sense that we have structured our policies in a manner which we believe are supportive of the Brady plan.

INTEREST RATES AND PARITY BETWEEN ECONOMIC PARTNERS

Senator **GRAHAM**. Mr. Chairman, I have one final area of inquiry, and that is the question of interest rates and parity between the United States and our major economic partners, specifically Japan.

Over the last 5 years the differential in interest rates between the United States and Japan has been in a range of 3 to 6 percent. Today we are at the lower end of that interest rate differential.

What has sustained the interest rate difference between the United States and Japan, and what, if any, United States policy initiatives could we take in order to achieve a closer and sustained basis of parity in interest rates?

Chairman **GREENSPAN**. The major reason why the Japanese interest rates have been lower than ours is that their saving propensities are so much higher than ours.

Over the last decade or so the cost of capital in Japan in real terms has been markedly lower than it has been here where inflation instabilities and concerns about the economy generally have induced a risk premium in the cost of capital in the United States which put us substantially above the Japanese, and that reflects itself in nominal interest rates, mainly on the long end of the market.

And until there is a substantial alteration in that process, it is very difficult to conceive of a joining of the two rates. Not only do the real rates have to converge, but clearly the inflation rates have to as well because while the real rate differential exists and is a major factor in the spread, the fact that the inflation rate in Japan in recent years has been markedly below ours reflects itself in a higher inflation premium in our long-term rates relative to yen-denominated rates.

So there are really two factors which are required to bring us into equality. One is the real rates and the other is the inflation rates, and both require that our saving rates converge or at least come much closer together.

So I would think that the issue of inducing saving is perhaps over the long run the major element which would bring the nominal interest rates into long-term parity.

Senator **GRAHAM**. Mr. Chairman, I believe I understood in response to a question by Senator Heinz that on behalf of the Board and the administration that there is a study underway on the issue of what policy initiatives might be taken to encourage increased savings rates in this country.

Chairman **GREENSPAN**. Yes. There is no formal procedure that has yet been initiated, but we are all independently looking at the process in full recognition that that will become a major item on the agenda for economic policy for this country in the years ahead.

Senator **GRAHAM**. Well, I applaud and encourage your efforts in that regard and will look forward to your recommendations.

Chairman **GREENSPAN**. Thank you.

Senator **GRAHAM**. Thank you, Mr. Chairman.

Senator **SASSER**. Thank you, Senator Graham.

Mr. Chairman, one final question, and then we'll conclude these hearings and let you get on with your lunch somewhere.

It has been interesting to note how phrases develop over time in economics, and we've got a new phrase now called soft landing. The question I've got is what is a so-called soft landing?

We noted the other day that the president of the Cleveland Federal Reserve Bank was quoted as saying that the goal of the Fed is not a soft landing. He says that the objective of the Federal Reserve Board is price stability, and of course we have seen in other times that when we get into price stability we may have a deflation in some areas of the economy.

Tell this committee this morning what you would characterize as a soft landing.

Chairman GREENSPAN. Well, first, Mr. Chairman, let me reiterate what the basic objective of monetary policy is.

As I stipulated in my formal remarks and earlier to this committee, we view economic policy generally and monetary policy very specifically to be focused on maintaining long-term sustainable economic growth. A necessary condition to achieve that is a non-inflationary environment.

So over the long term we view the zero inflation notion or the noninflationary environment as a necessary condition to make sure the economy grows at its maximum possible rate.

A soft landing is a term which has emerged which essentially tries to define an economic condition in which unstable inflationary pressures are contained without simultaneously throwing the economy into a recession.

Historically when we have speculative imbalances and inflationary pressures, any endeavor to contain them has led to a dramatic backing up of inventories, a slowing of the economy and a recession. That is now termed a hard landing.

A soft landing is one in which the inflationary instability containment is made without the economy going into a severe contraction.

Senator SASSER. I suppose we could characterize the downturn of 1982 as a crash landing if we were assigning degrees of severity. That was the worse recession.

Chairman GREENSPAN. It was not a soft landing.

Senator SASSER. Not a soft landing. [Laughter.]

Well, on that note, Mr. Chairman, I want to express my appreciation to you this morning for appearing before the committee. It has been a pleasure to see you again and a pleasure to have you here.

Chairman GREENSPAN. Thank you very much, Mr. Chairman.

Senator SASSER. This committee is adjourned.

[Whereupon, at 12:07 p.m., the committee adjourned, subject to the call of the Chair.]

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